



**King County**

**Wastewater Treatment Division**

Industrial Waste Program

Department of Natural Resources and Parks

201 South Jackson Street, Suite 513

Seattle, WA 98104-3855

**206-477-5300** Fax 206-263-3001

TTY Relay: 711

September 19, 2016

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Shimon Mizrahi  
Rainier Commons LLC  
918 S. Horton St., Suite 1018  
Seattle, WA 98134

Issuance of Wastewater Discharge Permit No. 7927-01 to Rainier Commons LLC by the King  
County Department of Natural Resources and Parks

Dear Mr. Mizrahi:

The King County Industrial Waste Program (KCIW) has reviewed and processed your application for issuance of an industrial wastewater discharge permit in accordance with Chapter 90.48 RCW as Amended, Public Law 92-500, and King County Code 28.84.060.

The enclosed issued Permit No. 7927-01 covers the wastewater discharge from the Rainier Commons LLC located at 3100 Airport Way South, Seattle, Washington. All discharges from this facility, and actions and reports relating thereto, shall be in accordance with the terms and conditions of this permit.

The enclosed Permit No. 7927-01 supersedes and cancels Major Discharge Authorization No. 4201-02 effective October 1, 2016. King County Code 28.84 authorizes a fee for each Permit issued by the King County Department of Natural Resources and Parks. The current fee for issuance of a Permit is \$5,500. King County will send an invoice for this amount.

If you have any questions about this permit or your wastewater discharge, please call Arnaud Girard at 206-477-5440 or email him at [arnaud.girard@kingcounty.gov](mailto:arnaud.girard@kingcounty.gov). You may also wish to visit our program's Internet pages at: [www.kingcounty.gov/industrialwaste](http://www.kingcounty.gov/industrialwaste).

**RCLLC 0012910**

Permit No.: 7927-01  
Issuance Date: September 19, 2016  
Effective Date: October 1, 2016  
Expiration Date: September 30, 2021



**King County**

## **WASTE DISCHARGE PERMIT**

Department of Natural Resources and Parks  
Industrial Waste Program  
201 S. Jackson Street, Suite 513  
Seattle, WA 98104-3855

In accordance with the provisions of Chapter 90.48 RCW as amended,  
Public Law 92-500, and King County Code 28.84.060,  
a Waste Discharge Permit is issued to:

### **Rainier Commons LLC - Old Rainier Brewery Site**

Facility location: 3100 Airport Way S.  
Seattle, WA 98134

Business hours phone: 206-650-4987

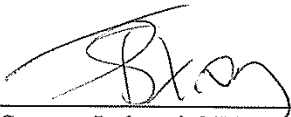
Emergency (24-hour) phone: 206-963-6656

Mailing address: 918 S. Horton St., Suite 1018  
Seattle, WA 98134

Permission is hereby granted to discharge industrial wastewater from the above-identified facility into the King County sewerage system in accordance with the effluent limitations and monitoring requirements set forth in this permit.

This permit is based on information provided in the permit application, which together with the following conditions and requirements are considered part of the permit. All requirements and ordinances of King County pertaining to the discharge of wastes into the King County sewerage system are hereby made a condition of this permit. All discharges and activities authorized herein shall be consistent with the terms and conditions of this permit.

This permit is not transferable without authorization from the King County Industrial Waste Program (KCIW). Failure to provide advance notice of a transfer renders this waste discharge permit voidable on the date of facility transfer.

By   
Despina Strong, Industrial Waste Program Manager

**RCLLC 0012911**

## **S1. EMERGENCY CONTACTS**

### **KING COUNTY**

Industrial Waste Program (8 a.m. – 5 p.m., weekdays): 206-477-5300  
*TODD GOWING* *206-477-5426*  
~~Arnaud Girard~~, Industrial Waste Compliance Investigator: ~~206-477-5440~~

Despina Strong, Industrial Waste Program Manager: 206-477-5444

#### **Your emergency contact after 5 p.m. weekdays and on weekends is:**

West Point Treatment Plant: 206-263-3801

#### **If unable to reach anyone at this number call:**

South Treatment Plant: 206-263-1760

### **WASHINGTON STATE DEPARTMENT OF ECOLOGY**

24-Hour emergency spill phone number: 425-649-7000

**C. Major Changes in the Renewed Permit**

There are no major changes since last issuance since this is a new permit upgraded from Major Discharge Authorization No. 4201-02.

**D. Company Identification**

SIC Code No.:	NA
Hazardous Waste Generator No.:	WAD051239994
Industry Type:	Contaminated Stormwater

Compound	Wastewater Screening Level (µg/L)
Polychlorinated biphenyls (PCBs) <sup>1</sup>	0.1

<sup>1</sup> The screening level is for each individual PCB Aroclor (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, and Aroclor 1262)

2. For each exceedance of the screening level, the permittee shall:
  - a. Notify KCIW within 24 hours of learning of the exceedance
  - b. Collect a follow-up sample and submit new data to KCIW within 14 days of becoming aware of the exceedance (or the next time discharge occurs if greater than 14 days)
  - c. Submit a written report within 14 days of learning of the exceedance (*14-Day Report*)
  - d. The report should explain the cause of the exceedance and corrective actions taken to respond to the exceedance and ensure ongoing compliance

E. **Best Management Practices for Control of PCB-Bearing Solids**

Rainier Commons shall implement stormwater source control BMPs in accordance with the Containment Plan submitted in the waste discharge permit application signed on January 4, 2016, and any subsequent version(s) approved by KCIW. BMPs shall mean schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to implement the prohibitions listed in 40 CFR 403.5(a)(1) and (b). BMPs also include treatment requirements, operating procedures, and practices to control facility site runoff, spillage, or leaks; sludge or waste disposal; or drainage from raw materials storage (from 40 CFR 403.3(e)). At a minimum, these BMPs shall include:

1. All roof drains, gutters, downspouts, and stormwater collection structures, such as catch basins and trenches, shall be fitted with a filter fabric media (Fiberweb Typar Geo-textile, "Ultra Tech" Ultra-DrainGuard, or a similar product) to capture solids and paint chips.
2. The following weekly source control site inspections and/or activities must be conducted:
  - a. Collect loose paint chips that have fallen on the ground in planting strips and roof surfaces.
  - b. Power sweep and vacuum the site's parking lots and walkway surfaces.

- e. A summary of all PCB results (self-monitoring and KCIW monitoring) that are greater than the screening limit of  $0.1\mu\text{g/L}$  for that time period and corrective actions taken
2. These reports will be used by KCIW to evaluate the adequacy of your stormwater source control BMP activities, wastewater treatment systems, and Slug/Spill Control Plan to identify any operational, structural and/or stormwater treatment upgrades that may be needed in order for you to continually maintain compliance with the terms of this permit. Proposed operational or structural upgrades must be consistent with the terms and conditions of this permit and must be approved by KCIW.

G. **Slug Discharge Control Plan**

By no later than December 1, 2016, Rainier Commons LLC - Old Rainier Brewery Site shall submit a Slug Discharge Control Plan. The purpose of the Slug Discharge Control Plan is to minimize the potential for slug discharges into the sanitary sewer system. The U.S. EPA defines a slug discharge as "any discharge of a nonroutine, episodic nature, including but not limited to, an accidental spill or a noncustomary batch discharge, which has a reasonable potential to cause interference or pass through, or in any way violate the POTW's [publicly owned treatment works] regulations, local limits, or permit conditions." At a minimum, your plan must include the following elements:

1. General company information:
  - a. Company name
  - b. Address
  - c. Contact person(s)
  - d. Phone number(s)
  - e. Emergency 24-hour phone number(s)
  - f. Operating schedule (days of week, hours)
  - g. Description of nature of business
2. Facility layout flow diagrams (The information submitted with your KCIW permit application can be attached to this plan.)
3. Inventory of process tanks and new and waste chemicals stored on site (include location, chemicals and concentration, container type, average stored volume, total container volume, and special provisions taken to prevent slug discharges)
4. Description of discharge practices, including nonroutine batch discharges
5. Procedures for immediately notifying KCIW of spills or slug discharges and for follow-up written notification within five days

#### **S4. EFFLUENT LIMITATIONS & SELF-MONITORING REQUIREMENTS**

##### **A. Effluent Limitations and Self-Monitoring Requirements:**

1. The permittee shall comply with the following discharge limits and monitor its discharges to the King County sewerage system as specified below.

<i>Sample Site No.</i>	<i>Limit Type</i>	<i>Sample Site Description</i>			
IW1056A	King County Local Limits	MH near southeast corner of building along Airport Way South			
IW1056B	King County Local Limits	MH near northeast corner of Building 2 on north side of site			
<i>Parameter</i>	<i>Daily Average (mg/L)</i>	<i>Instantaneous Maximum (mg/L)</i>	<i>Maximum Loading<sup>1</sup> (lbs/day)</i>	<i>Sampling Frequency</i>	<i>Sample Type</i>
Arsenic, Total <sup>2</sup>	1.0	4.0	0.39	NA	NA
Cadmium, Total	0.5	0.6	0.16	NA	NA
Chromium, Total	2.75	5.0	2.74	NA	NA
Copper, Total	3.0	8.0	3.38	NA	NA
Lead, Total	2.0	4.0	0.57	Semi-annually	Grab
Mercury, Total	0.1	0.2	0.06	NA	NA
Nickel, Total	2.5	5.0	2.60	NA	NA
Silver, Total	1.0	3.0	0.27	NA	NA
Zinc, Total	5.0	10.0	5.63	NA	NA
Cyanide, Amenable	2.0	3.0	NA	NA	NA
Nonpolar FOG	100	NA	NA	NA	NA
PCBs per Aroclor <sup>3</sup>	See S3.3 for screening limit			Semi-annually	Grab <sup>4</sup>
<i>pH (s.u.)</i>	<i>Daily Minimum</i>	<i>Minimum</i>	<i>Maximum</i>	NA	NA
	5.5	5.0	12.0		
<i>Total Daily Maximum Discharge Volume (gpd)</i>		<b>Stormwater</b> 135,000		NA	NA

<sup>1</sup> Applicable poundage limit for copper and zinc equals the daily average concentration in mg/L, multiplied by the flow in million gallons per day, multiplied by 8.34. Applicable poundage limits for other metals have been adjusted to prevent significant increase of pollutants at King County's West Point Treatment Plant influent. Loading limits apply to the cumulative discharge from all sites. Discharge volumes used to calculate metals loading shall be based on the surface area draining to the sewer for each site and official rainfall data reported by NOAA at Boeing Field.

<sup>2</sup> For the determination of total metals (which are equivalent to total recoverable metals) the sample is not filtered before processing.

<sup>3</sup> PCB samples must be analyzed with a detection limit not to exceed 0.1 micrograms per liter (µg/L) per aroclor (Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, and Aroclor 1262)

<sup>4</sup> Self-monitoring samples must be collected during or immediately following a rainfall event, at times when measurable flows (rain) to the system are occurring.

Total FOG unless the value is 100 mg/L or greater, in which case the concentration of nonpolar FOG must be reported.

- e. For situations where the only discharge for the 24-hour period is of short duration (e.g., batch discharge), resulting in the inability to collect composite samples that meet the definitions described in Number 5.a-c above, the permittee shall collect grab samples every 15 minutes during the duration of the discharge. Regardless of the number of aliquots making up this sample, it will be used to evaluate compliance with daily average limits.
4. Discharges of greater than pH 12 are prohibited unless the permittee obtains written approval (email is sufficient) from KCIW prior to discharge and is subject to special conditions to protect worker safety, the collection system, and treatment works.
5. Should an automatic pH recording system fail (if required by permit or compliance order), the permittee shall manually check the pH at least four times per hour. Any discharge without a pH record shall be considered a violation of this permit.

**B. Nonrequired Self-Monitoring**

All sampling data collected by the permittee and analyzed using procedures approved by 40 CFR 136 or approved alternatives shall be submitted to KCIW whether required as part of this permit or done voluntarily by the permittee.

**C. Violation Criteria**

1. Wastewater from regulated processes shall comply with the effluent limitations prior to dilution with other wastewaters unless a fixed alternative discharge limit is approved by KCIW. (See Section S8.C.4 for further information about dilution.)
2. A review of any violation will include consideration of testing accuracy prior to enforcement action.
3. The more restrictive limitation (concentration or mass) shall prevail for determining violations.
4. Daily average and maximum monthly average limits apply to composite samples and to grab samples from short-term batch discharges.
5. Instantaneous maximum limits apply to grab samples, with the exception of grab samples from short-term batch discharges.



3. When an effluent check shows a pH violation, as defined in King County Code 28.84.060.N "Violations," the permittee shall take immediate steps to bring the discharge back into compliance. If this is not possible, the permittee shall cease discharge.
4. Compliance with these requirements does not relieve the permittee of responsibility to maintain continuous compliance with the conditions of this permit or the resulting liability for failure to comply.

**E. Limitations Applicable to All Sites**

**1. General**

The permittee's discharge shall not interfere with the operation of the King County sewerage system, cause King County to exceed its NPDES permit limits, or endanger local utility or King County sewer workers.

The permittee's discharge shall not violate any discharge standard, limitation, or specific prohibition of King County Code 28.84.060 or local discharge limits applicable on the date of discharge. (See Section 28.84.060.D-F of King County Code.)

Prohibitions previously referenced include, but are not limited to, substances causing fire or explosion hazard, flow obstruction, excess oxygen demand, and toxic vapors.

Limitations listed in Section S4 include, but are not limited to, restrictions on settleable solids, organic compounds, hydrogen sulfide, and polar FOG.

**2. Organic compounds**

No person shall discharge any organic pollutants that result in the presence of toxic gases, vapors, or fumes within a public or private sewer or treatment works in a quantity that may cause acute worker health and safety problems.

Organic pollutants subject to this restriction include, but are not limited to, any organic compound listed in 40 CFR 433.11 (e) Total Toxic Organics (TTO) definition, acetone, 2-butanone (MEK), 4-methyl-2-pentanone (MIBK), and xylenes.

Dischargers are required to implement "good housekeeping" and best management practices in order to prevent the discharge of a concentrated form of any of the preceding organic pollutants.

## **S5. SAMPLE SITE ACCESS AND IDENTIFICATION**

- A. Unobstructed access to sample sites shall be available to authorized KCIW personnel during normal operating hours. The permittee shall be responsible for providing alternate sample sites in the event of obstruction of access or upon evidence of tampering with the monitoring equipment.
- B. The permittee shall allow KCIW to permanently label the sample sites used to collect wastewater samples.
- C. The permittee shall, at all reasonable times, allow authorized representatives of KCIW to enter, inspect, and sample as specified in King County Code 28.84.060.L, "Inspection and Sampling of Industrial Users."

**D. Hazardous Wastes**

1. Within 180 days following commencement of discharge or permit issuance, whichever is later, the permittee must notify KCIW, the U.S. EPA, and the Washington State Department of Ecology of any discharge of a listed or characteristic RCRA hazardous waste. Identifying the listed or characteristic RCRA hazardous wastes on the permittee's wastewater discharge permit application serves as notice to KCIW. This is a one-time notification requirement. The contents of the notification may vary according to the quantity of waste discharged (see "Notification of the Discharge of Hazardous Wastes" in King County Code 28.84.060.).
2. Whenever the U.S. EPA publishes new RCRA rules identifying additional hazardous wastes or new characteristics of hazardous wastes, the permittee must notify KCIW, the U.S. EPA, and the Washington State Department of Ecology if any of these wastes are discharged to the King County sewerage system. Notification must occur within 90 days of the effective date of the published regulation.

**E. Continuing Discharge after Permit Expiration Date**

This permit does not authorize discharge after its expiration date. If the permittee wishes to continue discharge after the expiration date, an application must be filed for reissuance of this permit at least 180 days prior to the expiration date. If the permittee submits its re-application in the time specified herein, the permittee shall be deemed to have an effective waste discharge permit or authorization until KCIW issues or denies the new waste discharge permit. If the permittee fails to file its re-application in the time period specified herein, the permittee will be deemed to be discharging without a discharge permit after the current permit's expiration date.

analytical technique for the pollutant in question, sampling and analysis shall be performed in accordance with the procedures set forth in the U.S. EPA publication entitled *Sampling and Analysis Procedures for Screening of Industrial Effluents or Priority Pollutants*, April 1977 or *Standard Methods*, latest edition and amendments thereto, or with any other sampling and analytical procedures approved by the U.S. EPA.

**E. Lab Accreditation**

All self-monitoring data submitted to KCIW that required a laboratory analysis must have been performed by a laboratory accredited by the Washington State Department of Ecology for each parameter tested. This does not apply to field measurements performed by the permittee, such as pH, temperature, flow, atmospheric hydrogen sulfide, total dissolved sulfides, settleable solids by Imhoff cone, or process control information.

**F. Falsifying Information**

The act of knowingly falsifying, tampering with, or knowingly rendering inaccurate any monitoring device, report, or method required pursuant to the federal pretreatment standards, King County Code 28.84.060, or special conditions of this permit shall constitute a violation of this permit, and shall be subject to the legal remedies available under "Revocation of Permit or Authorization" and "Penalties and Enforcements" in King County Code 28.84.060.

**G. Toxicity Testing**

If KCIW is required by the Washington State Department of Ecology to determine the source of a pattern of acute toxicity pursuant to its treatment plant NPDES permit, the permittee may be required to test its effluent for toxicity according to procedures to be determined by KCIW.

**H. Signatory Requirements for Industrial User Reports**

Any report required by this permit shall meet the signatory and certification requirements listed in King County Code 28.84.060 and King County Code 28.82.

4. The permittee shall use spill prevention practices to preclude the discharge of liquids, solids, or gases which, by reason of their nature or quantity, are, or may be, sufficient, either alone or by interaction with other substances, to cause fire or explosion.
5. All process tanks and chemical storage containers shall be accurately labeled. Emergency phone numbers of King County, the fire department, the permittee's 24-hour corporate contact, and Washington State Department of Ecology shall be posted at all sites that KCIW requires.
6. The permittee shall ensure that concentrated waste from process tank filters and other equipment is prevented from entering the sanitary sewer unless it is treated to meet the discharge conditions of this permit.
7. The permittee shall maintain and use product recovery options, such as drag-out rinses for each plating bath or process, as required to meet the discharge conditions of this permit. Recovered materials shall not be discharged to the sanitary sewer unless they are treated to meet the discharge conditions of this permit.

**C. Pretreatment Equipment Maintenance and Operations**

1. All pretreatment systems used to bring the permittee's discharge into compliance with King County's discharge limitations shall be maintained continuously in satisfactory and effective operations by the permittee at the permittee's expense, and shall be subject to periodic inspections by authorized KCIW personnel. These systems shall be attended at all times during discharge to the King County sewerage system. In the event that such equipment fails, the permittee must notify KCIW immediately and take spill prevention precautions.
2. The permittee shall not initiate construction or modification of a pretreatment system prior to receiving KCIW approval of plans and specifications per WAC 173-240. In addition, KCIW may require an engineering report and an operations and maintenance manual.
3. KCIW shall be contacted before the beginning of any limited experimental modifications or new equipment testing that could reasonably be expected to affect effluent quality or quantity. This experimental work shall proceed only after securing written approval from KCIW and following the permittee's adherence to any applicable special conditions.

## **S9. GENERAL CONDITIONS**

- A. The discharge of any pollutant more frequently than, or at a level in excess of, that identified and authorized by this permit shall constitute a violation of the terms and conditions of this permit. Whenever the permittee refuses to take corrective action or continues the violating condition, the imposition of civil penalties including fines up to \$10,000 for each violation per day and/or termination of this permit may result. Termination of this permit may require disposal of the industrial waste in some manner other than into the public sewer, private sewer, or side sewer tributary to the King County sewerage system at the expense of the person holding the permit. Any person causing damage to a public sewer or treatment facility by discharges in violation of the terms and conditions of this permit shall be liable for any such damage incurred by King County as a result of such damage or discharge. Where criminal enforcement action is considered in a particular case, that case may be referred to state or federal authorities.
- B. The diversion or bypass of any discharge from any pretreatment facility utilized by the permittee to maintain compliance with the terms of this permit is prohibited except where unavoidable to prevent loss of life or severe property damage. The procedure outlined in Section S4.D shall be followed in case of such a diversion or bypass.
- C. After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its terms for those causes cited in King County Code 28.84.060.
- D. If a toxic standard or prohibition (including any schedule of compliance specified in such effluent standard or prohibition) is established under Section 307(a) of the federal Clean Water Act for a toxic pollutant, which is present in the discharge authorized herein, and such standard or prohibition is more stringent than any limitation upon such pollutant in this permit, this permit will be revised or modified in accordance with the toxic effluent standard or prohibition and the permittee shall be so notified. Section 307(a) requires that the administrator of the U.S. EPA shall promulgate effluent standards (or prohibitions) for toxic pollutants that he or she has listed as such.
- E. Nothing in this permit shall be construed as excusing the permittee from compliance with any applicable federal, state, or local statutes, ordinances, or regulations.
- F. All requirements and ordinances of the U.S. EPA and the Washington State Department of Ecology pertaining to hazardous and toxic wastes, disposal facilities, and discharge of wastes into the King County sewerage system, are hereby made a condition of this permit.





## Industrial Waste Program Company Fact Sheet

September 19, 2016

### COMPANY INFORMATION

**Company/Agency name:** Rainier Commons LLC  
**Facility address:** 3100 Airport Way S.  
Seattle, WA 98134  
**Mailing address:** 918 S. Horton St., Suite 1018  
Seattle, WA 98134  
**Treatment plant:** West Point Treatment Plant  
**Corp. contact & phone:** Shimon Mizrahi, 206-650-4987  
**Site contact & phone:** Doug Lansing, 206-963-6656  
**Company/Agency type:** General Type (Contaminated Stormwater)  
**Days operating:** 365  
**SIC number:** NA  
**EPA ID number:** WAD051239994  
**Compliance investigator:** Arnaud Girard

### PERMIT INFORMATION

**Permit number:** 7927-01  
**Effective date:** October 1, 2016  
**Expiration date:** September 30, 2021

#### Description of sample sites, limit types, and discharge volumes:

Sample Site No.	Description	Limit Type	Maximum Discharge Volume (gallons per day)
IW1056A	Manhole (MH) near southeast corner of building along Airport Way South	King County Local Limit	100,000
IW1056B	MH near northeast corner of Building 2 on north side of site	King County Local Limit	35,000

### MONITORING FEE PARAMETER

Heavy Metals



### **Treatment System**

Rainier Commons has implemented source control best management practices (BMPs) to control the discharge of PCB-bearing sediment and paint chips to the combined sewer and SPU storm drainage system. These BMPs include:

1. Installing, maintaining, and/or replacing filter fabric media on all roof drains, gutters, downspouts, and stormwater collection structures, such as catch basins and trenches with filter fabric media
2. Collecting loose paint chips that have fallen on the ground in planting strips and roof surfaces
3. Power sweeping and vacuuming the site's parking lots and walkway surfaces

### **Compliance History**

KCIW first collected stormwater samples from this site in 2008 following source control activities associated with the Lower Duwamish Waterway and East Waterway Superfund sites indicating that the Rainier Commons site was a source of PCBs. In 2010, Rainier Commons, at KCIW's request, jet cleaned drainage structures (catch basins, trenches, drainage pipes, and manholes) leading to the combined sewer. Samples of the wastewater generated during the line cleaning project indicated that, in addition to PCBs, lead was also a parameter of concern at the site. Following the line cleaning, KCIW met with Rainier Commons staff and requested that a permit application be completed for the stormwater discharge to the combined sewer. KCIW issued Discharge Authorization (DA) No. 4201-01 to Rainier Commons in 2011. The DA included a screening limit of 0.1 µg/L for each PCB Aroclor and required the analysis to be performed at a method detection limit (MDL) not to exceed 0.1 µg/L. Since that date, effluent samples collected by KCIW and the permittee have indicated occasional PCB detection above the established screening level of 0.1 µg/L, but generally below the reporting detection limit (RDL) for Aroclors 1254 and 1260 (see data in *Trends in Discharge of Pollutants of Concern* section below).

### **Trends in Discharge of Pollutants of Concern**

The primary parameters of concern at the site are PCBs, primarily Aroclors 1254 and 1260. Other PCB Aroclors have not been detected above the MDL during the past permit cycle. KCIW and self-monitoring data collected since 2011 indicates that Aroclors 1254 and 1260 are generally found at concentrations below the established screening level of 0.1 µg/L. When detected above the MDL the values have been below the RDL (see enclosed chart).

### **Slug and/or Spill Control Plan**

Submittal of a Slug and Spill Control Plan is a requirement of this permit (Special Condition S3.G). This requirement is in accordance with 40 CFR 403.8(f)(2)(vi) of the Federal Pretreatment Regulations. This plan is required to ensure that procedures are in place to respond to an accidental slug discharge of PCB-bearing material to the combined sewer.

### **Self-Monitoring Requirements**

This permit requires that Rainier Commons collect a semi-annual grab sample for PCB and lead at each sample site during or immediately following a rainfall event. The sample results will be used to supplement field observations and the semiannual reports on compliance with BMPs to gauge whether source control BMPs implemented at the site are sufficient to prevent PCB-bearing material from being discharged to the combined sewer.

sewers. Implementation of source control BMPs at this site are necessary as stormwater from the site receives no treatment at this time. The term BMPs is defined as schedules of activities, prohibitions of practices, maintenance procedures, and other management practices implemented to control pollutants. The list of items identified constitutes the minimum set of BMPs that must be implemented.

Special Condition F requires that Rainier Commons submit semi-annual reports that include a review of compliance with BMPs and list sample results for each reporting period. The purpose of these reports is to periodically evaluate the adequacy of the permittee's stormwater source control BMP activities to identify any additional operational, structural and/or treatment upgrades that may be needed in order for Rainier Commons to continually maintain compliance with the terms of this permit. This condition requests that these reports include a summary of any additional source control and sampling/monitoring activities conducted in accordance with conditions listed in EPA work plan approvals. As discussed above, paint removal remediation work will be performed in multiple phases. Rainier Commons will submit a work plan for each phase of work for EPA review and approval. During its work plan review and approval process, EPA consulted with KCIW and SPU to ensure that protective measures and monitoring requirements are implemented to prevent PCB-bearing material from being introduced into public drainage and sewerage infrastructures. KCIW will use these semi-annual reports to verify that additional phase-specific source control and sampling activities are performed.

Special Condition G requires that Rainier Commons submit a Slug and Spill Control Plan. This submittal requirement is in accordance with 40 CFR 403.8(f)(2)(vi) of the Federal Pretreatment Regulations. This plan is required to ensure that procedures are in place to respond to an accidental slug discharge of PCB-bearing material to the combined sewer.

#### **Limit Calculations**

King County local limits apply to the stormwater discharge to the combined sewer from this site. A PCBs screening level of 0.1 µg/L per Aroclor based on the analysis method detection limit has been established to determine whether source control BMPs implemented at the site are sufficient to be protective of King County West Point Treatment Plant and minimize recontamination of PCBs in the Duwamish river sediments.

The applicable poundage limits for all metals, except copper and zinc, have been adjusted so as not to increase the influent loading at King County's West Point Treatment Plant by more than one standard deviation in average flow conditions.

#### **Changes since the Last Permit**

N/A – New permit

#### **Comments**

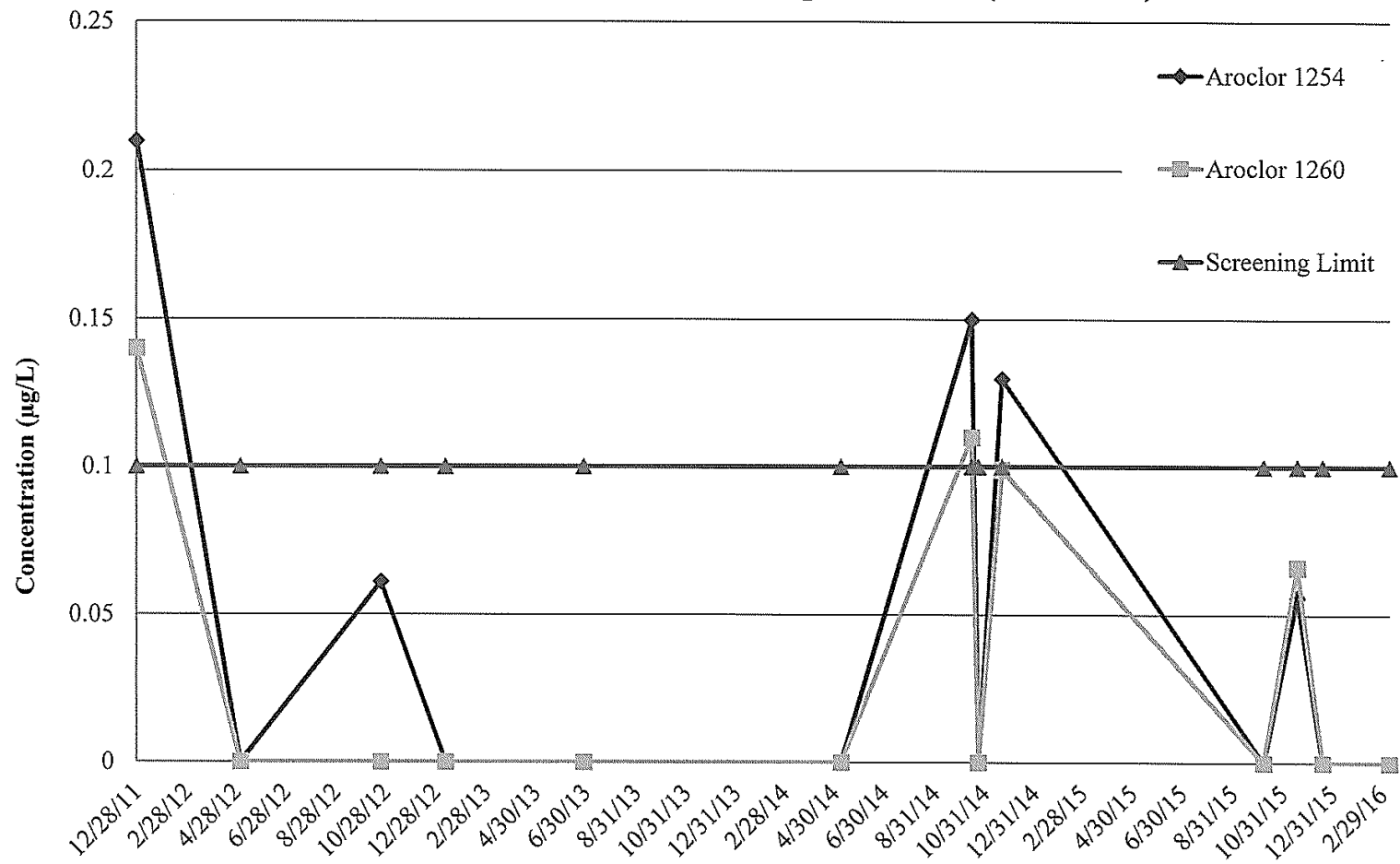
Publication: No comments received

Application: No comments received

First draft: None.

# Rainier Commons LLC

## KCIW and Self-Monitoring PCB Data (2011-2016)



**From:** Doug Lansing <lansinghomes@aol.com>  
**To:** Arnaud.Girard <Arnaud.Girard@kingcounty.gov>  
**Cc:** Flannery <Flannery@ryanlaw.com>  
**Subject:** King County Discharge Permit 7927-01 Submittal  
**Date:** Fri, Oct 28, 2016 9:33 am  
**Attachments:** Stormwater Sampling Site Access Plan - final.pdf (383K)

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Good Morning Arnaud;

I've enclosed our submittal regarding access to sampling site IW1056B. It was a pleasure meeting and working with Tim on this.

Tim and I shared a split sample from IW1056A. My results came back as "non-detect" for PCBs. When you get your results for both sampling sites, would you mind sharing your results, as well? I will, of course, formally submit our results as a part of our semi-annual reporting.

Have a great weekend;

Doug Lansing

King County Waste Discharge Permit Number 7927-01

King County Industrial Waste (KCIW) Sample Site IW1056B Accessibility Plan

As directed by King County Industrial Waste Management, Rainier Commons LLC applied for, and was granted, a Waste Discharge Permit effective October 1, 2016. The permit grants Rainier Commons LLC permission to discharge its storm water runoff, generated by naturally occurring rain events, into the King County sewerage system.

Rainier Commons is the owner and landlord at the Old Rainier Brewery site, which is now a multi-use campus for artists and artisans, among others. Rainier Commons LLC does not produce any industrial waste water through its own operations.

Section S3.C.1 of the subject permit requires Rainier Commons to submit a plan for KCIW review and approval, for providing unobstructed access to sample site IW1056B. This sample site corresponds to Man Hole #28 on site maps developed by Rainier Commons and provided to KCIW personnel. The Man Hole is located in the northeast quadrant of the Rainier campus, at the intersection of Buildings 1 and 2.

Access to this Man Hole is achieved by stepping over the low (2 ½' high) barrier fence running along the campus' east access road, then proceeding down-grade approximately twenty feet across landscape vegetation.

As part of this plan, Rainier Commons has directed our grounds keeper/landscape contractor to maintain the access area, ensuring vegetation and ground covers do not impede access.

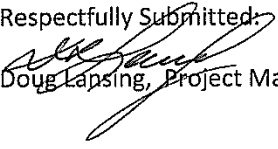
On October 12, 2016, Mr. Tim Coffey from the KCIW program office met with Rainier Commons personnel to conduct a site review of sample location IW1056B. Rainier Commons demonstrated the use of a catch basin cover lifting device, providing clear access to the interior of the subject Man Hole. Mr. Coffey collected photographs and measurements of the Man Hole, including the invert elevation of the discharge pipe for the Man Hole (approximately nine feet from top of lid).

After collecting this data, Mr. Coffey determined that KCIW personnel could safely and effectively perform sampling from this location without the need to remove the concrete Man Hole lid. KCIW sampling personnel will utilize small diameter plastic tubing, connected to a pump, to draw aqueous samples from site IW1056B.

On October 13, 2016, Mr. Coffey returned to Rainier Commons and safely and easily collected an aqueous sample from the sample site location.

Please accept this letter as Rainier Commons' response to Condition S3.C.1 of the subject permit.

Respectfully Submitted:

  
Doug Lapsing, Project Manager



## Email Received by KCIW



Kciw, Info <Info.Kciw@kingcounty.gov>

Tue 1/2/2018 11:34 AM

To: Doug Lansing <(b) (6)>;

*Thank you!*

The King County Industrial Waste Program has received your email.

If you submitted an application or report, this email serves as confirmation that we received it. If you have a question or are reporting an unusual event, a representative from our program will contact you.

For more information on our program, visit our [website](#) or call us at 206-477-5300.



## Rainier Commons Semi-annual Self-Monitoring Report

  
**Doug Lansing**

Tue 1/2/2018 11:34 AM

To:Gowing, Todd <Todd.Gowing@kingcounty.gov>; info.KCIW@kingcounty.gov <info.KCIW@kingcounty.gov>;

Cc:Jo Flannery <flannery@ryanlaw.com>;

1 attachments (3 MB)


King County Self-monitoring Report 2017-2.pdf;

Good Morning Todd:

Attached, please find our Self-monitoring report for the second half of 2017. Both sample locations were non-detect for PCBs.

Please don't hesitate to call, should you have any questions.

Sincerely:

  
Doug Lansing  
Project Manager  
Rainier Commons, LLC

(b) (6)





# Industrial Waste Program Semi-Annual Monitoring Report

Send to: King County Industrial Waste Program  
201 S. Jackson Street, Suite 100  
Seattle, WA 98104-3855  
Phone 206-477-5300 / FAX 206-263-3001  
Email: info.KCIW@kingcounty.gov

Company Name: Rainier Commons LLC

This form is available at [www.kingcounty.gov/industrialwaste](http://www.kingcounty.gov/industrialwaste).

Please specify year: 2017 Semi-Annual Report for Semester 2 Sample Site No.: IW1056B Permit/DA No.: 7927-01

	Sample Date month/day	Sample Type C (Composite) G (Grab)	Aroclor 1016 (µg/L)	Aroclor 1221 (µg/L)	Aroclor 1232 (µg/L)	Aroclor 1242 (µg/L)	Aroclor 1248 (µg/L)	Aroclor 1254 (µg/L)	Aroclor 1260 (µg/L)	Lead (Pb) (mg/L)
Semester 2	Jul/____									
	Aug/____									
	Sep/____									
	Oct/____									
	* Nov/15	G	N/D						N/D	.00383
	Dec/____									

NOTES:  
\* REPORTING LIMIT FOR PCBs = 0.100 µg/L

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Signature of Principal Executive or Authorized Agent \_\_\_\_\_ Date \_\_\_\_\_

**Due Date:** Semi-annual report for Semester 1 is due by July 15 each year. **Please Note:** Do not include original laboratory reports with this form unless otherwise requested. Keep the original laboratory reports on file and available for inspection for at least three years.

RCLLC 0012934



# Industrial Waste Program Semi-Annual Monitoring Report

Send to: King County Industrial Waste Program  
201 S. Jackson Street, Suite 100  
Seattle, WA 98104-3855  
Phone 206-477-5300 / FAX 206-263-3001  
Email: info.KCIW@kingcounty.gov

Company Name: Rainier Commons LLC

This form is available at [www.kingcounty.gov/industrialwaste](http://www.kingcounty.gov/industrialwaste).

Please specify year: 20 Semi-Annual Report for Semester 2 Sample Site No.: IW1056A Permit/DA No.: 7927-01

	Sample Date month/day	Sample Type C (Composite) G (Grab)	Aroclor 1016 (µg/L)	Aroclor 1221 (µg/L)	Aroclor 1232 (µg/L)	Aroclor 1242 (µg/L)	Aroclor 1248 (µg/L)	Aroclor 1254 (µg/L)	Aroclor 1260 (µg/L)	Lead (Pb) (mg/L)
Semester 2	Jul/____									
	Aug/____									
	Sep/____									
	Oct/____									
	Nov/ <u>15</u>	<u>G</u>	<u>N/D</u>						<u>N/D</u>	<u>.00174</u>
	Dec/____									

NOTES:  
\* REPORTING LIMIT FOR PCBs = 0.0993 µg/L

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

[Signature]  
Signature of Principal Executive or Authorized Agent

\_\_\_\_\_  
Date

**Due Date:** Semi-annual report for Semester 1 is due by July 15 each year. **Please Note:** Do not include original laboratory reports with this form unless otherwise requested. Keep the original laboratory reports on file and available for inspection for at least three years.

RCLLC 0012935

## Rainier Commons BMP Report



**Doug Lansing**

Tue 1/2/2018 10:51 AM

To: Gowing, Todd <Todd.Gowing@kingcounty.gov>; info.KCIW@kingcounty.gov <info.KCIW@kingcounty.gov>;

1 attachments (5 MB)

King County BMP Report 2017-2.pdf;

Good Morning Todd;

Attached, please find the 2017 second-half report on Rainier Commons' Best Management Practices (BMPs), demonstrating the effectiveness of our control activities, during our PCB abatement process.

Please don't hesitate to call if you have any questions.

Sincerely:



Doug Lansing  
Project Manager  
Rainier Commons, LLC  
(b) (6)



**Rainier Commons LLC**  
**Semiannual Report on Compliance with Best Management Practices for the Control of PCB-Bearing Solids**

**Reporting Period: July 1, 2017 through December 31, 2017**

Rainier Commons, in accordance with the reporting requirements of King County Wastewater Discharge Permit # 7927-01, is pleased to submit the following report. This report is intended to demonstrate compliance with the reporting requirements of Permit Section S3.F. Specific permit reporting requirements are re-stated below, in italics; followed by Rainier Commons' response.

*1a. A summary of stormwater source control BMP activities conducted during the reporting period*

Please see Exhibit "A" (two pages) for a summary of Rainier Commons' source control BMP activities.

*1b. A summary of any additional source control and sampling/monitoring activities conducted during the reporting period in response to requirements specified by the Environmental Protection Agency (EPA) in its December 18, 2013, conditional approval of Rainier Commons' Work Plan for Exterior paint removal dated March 25, 2013, and any subsequent EPA approvals related to individual Phased Work Plans related to site building exterior paint removal phases*

No additional, EPA mandated sampling/monitoring activities were required during this reporting period. No additional abatement work performed, pending EPA approval of the next, proposed work phase.

*1c. An evaluation of how well the BMPs and/or pretreatment system functioned to minimize the discharge of PCBs into the sanitary sewer*

As evidenced by on-going sampling and testing by both Rainier Commons And King County Industrial Waste Program personnel, our site source control activities continue to provide a high degree of confidence in these actions, with a no, random test results reading above the Wastewater Screening Level.

*1d. A report on any operations and maintenance training conducted for employees that work at the site for the benefit of performing BMP activities, maintaining compliance with the permit, and continuing minimization of PCB discharges*

All Rainier Commons personnel involved with any work involving the handling materials potentially containing PCBs are re-trained annually and carry current "HAZWOPER" certifications.

*1e. A summary of all PCB results (self-monitoring and KCIW monitoring) that are greater than the screening limit of 0.1µg/L for that time period and corrective actions taken*

No sampling results tested higher than the screening limit, during this reporting period.

Should any additional information be required, please contact the undersigned at (b) (6) or (b) (6)

Sincerely:

  
Doug Lansing  
Project Manager  
Rainier Commons LLC

**RCLLC 0012937**

## EXHIBIT "A"

### RAINIER COMMONS SOURCE CONTROL "CONTAINMENT PLAN"

#### Ongoing Maintenance:

It has been our ongoing practice to collect any and all loose paint chips from the exterior horizontal surfaces of the property. Prior to performing such work, all personnel must wear protective clothing and gear, including but not limited to ; glove, mask and/or any other equipment and attire required and deemed necessary by WISHA/L&I and/or EPA. All waste collected is stored in regulated containers, properly documented, characterized, tested, and transported and disposed of by qualified environmental firms.

#### Cleaning of Planting Strips and Roof Surfaces:

On an ongoing basis; designated and trained personnel inspect, hand pick, and vacuum (using HEPA filtered equipment) and paint chips that have fallen to the ground or roof surfaces. All material collected is documented and disposed of in designated and labeled PCB containing waste containers per EPA 40C.F.R. regulations.

#### Filter Socks on Roof Drains and Catch Basin Drains:

In conjunction with the above described work, a weekly inspection of all roof drains and catch basins is conducted. All such drains have been previously fitted and equipped with a filter fabric media so as to filter out debris and contaminants. During the weekly inspection; is deemed necessary and the debris has reached an appreciable quantity with the filter fabric; the worker will remove the drain grate, clean around the grate, and dispose of the debris and filter fabric in the same manner as described above. The work then re-fits the drain with either "Fiberweb Typar" Geo-Textile drain fabric, "Ultra Tech" Ultra-DrainGuard catch basin filters or a similar product. Once the fabric filter and debris have been removed and disposed of, Clean Harbors is notified for debris transport and disposal based on the current "profile" in place for such materials. Profile results are forwarded to the EPA, in connection with exterior work plan documents and reports.

#### Cleaning of Parking Lot and Walkway Surfaces:

On a consistent weekly basis McDonough and Sons, Inc. Sweeping Services power sweeps and vacuums the Rainier Commons parking lots and walkway surfaces reachable by vacuum truck. Debris from each sweeping is disposed of in a locked and properly labeled transportation container located on the west side of the property. Clean Harbors periodically collects representative samples of materials inside the transportation boxes. Once collected, these samples are transported to an independent laboratory for testing. Results are forwarded to the EPA, in connection with exterior work plan documents and reports.

#### Catch Basin Sediment Removal:

Generally on a quarterly basis, Rainier Commons removes sediment from its catch basins. The catch basin filter socks are removed and replaces as described above. During this cycle, if sediments are observed to be accumulating in the bottom of the catch basins the sediment is removed through the use of hand tools and suction via Hepa-filtered shop vacuums. The sediment is then placed in the locked box in the designated and signed hazardous material storage area, for characterization and proper disposal.

## *EXHIBIT "A"*

### **Enhanced Site Source Control Actions**

#### **Calendar Year 2017**

As a continuation of our enhanced site source control program, which began September 15, 2014, a two-man crew will continue to perform control activities, including:

- Multiple rounds of cleaning and vacuuming on the roofs of Buildings 24, 1, 2, 3, 26, 5A, 22, 25, 6, 7, 18, 9, 14, and 15.
- Install/replace roof drain filters on all roofs cleaned, as needed, based on frequency and severity of rain events
- Ongoing change-out of roof filters, daily, during rain events
- Multiple cycles of hand vacuuming the parking lot and courtyard with hepa-filter vacuums
- Catch Basins cleaned of sediments, as needed, on a quarterly basis
- Hand removal and disposal of flaking paint from exterior walls to prevent introduction of PCBs into the storm water system
- Monthly change-out of HEPA filters used during Control activities

These enhanced activities, in conjunction with our other on-going maintenance activities, continue to provide for a very effective system of controls for PCB-laden paint, as evidenced by our catch basin sampling results.



**King County**

**Wastewater Treatment Division**  
Industrial Waste Program

Department of Natural Resources and Parks

201 South Jackson Street, Suite 513  
Seattle, WA 98104-3855

**206-477-5300** Fax 206-263-3001  
TTY Relay: 711

November 28, 2017

Shimon Mizrahi  
Rainier Commons LLC  
918 S. Horton Street, Suite 1018  
Seattle, WA 98134

Semiannual Self-Monitoring Report due January 15, 2018

Dear Shimon Mizrahi:

This letter is to remind you that the Rainier Commons LLC - Old Rainier Brewery Site wastewater discharge authorization requires semiannual reporting of your monitoring results by **January 15, 2018**. Please consult your Permit No. 7927-01 for the specific monitoring requirements.

Failure to submit the required report on time could result in enforcement action, including advertisement of the reporting violation in the display ad placed in *The Seattle Times* by the King County Department of Natural Resources and Parks.

You must use a King County self-monitoring form to submit results unless an alternate form is approved by King County. If no discharge has occurred during the sampling period, the report shall be submitted notifying King County that no discharge has occurred.

Your report should be sent to [info.KCIW@kingcounty.gov](mailto:info.KCIW@kingcounty.gov). Alternatively, reports can be mailed to King County Industrial Waste Program, 201 South Jackson Street, Suite 513, Seattle, Washington 98104-3855.

If you have any questions about this notice or need a copy of the form, please contact Todd Gowing at 206-477-5426 or [todd.gowing@kingcounty.gov](mailto:todd.gowing@kingcounty.gov).

Sincerely,

Mark Henley  
Program Manager

**RCLLC 0012940**

## Rainier Brewery, Permit #7927-01



**Doug Lansing**

Tue 11/28/2017 10:20 AM

To: Todd.gowing@kingcounty.gov <Todd.gowing@kingcounty.gov>;

Bcc: Jo Flannery <flannery@ryanlaw.com>;

1 attachments (816 KB)

Rpt\_1711264\_Rainier\_Commons\_Final\_v2.pdf;

Good Morning Todd:

I am in receipt of your letter, dated November 2, 2017, sent to Rainier Commons LLC in care of Mr. Shimon Mizrahi, regarding the results of recent grab-sampling conducted by King County's Industrial Waste Program personnel. The sampling was conducted at our campus, The Old Rainier Brewery, at sample locations identified as IW1056A (our M/H6) and IW1056B (our M/H28), as defined in Waste Discharge Permit 7927-01.



Results of these samples identified a few, trace indications of PCBs, none of which exceeded the individual Screening Level of 0.1 ug/L.

Upon receipt of your letter, Rainier Commons immediately initiated a review of our published Site Source Control plan, as well as a physical inspection of the implementation of this plan.

Execution of the Best Management Practices (BMPs) identified in the plan are well documented and performed on a routine basis. Historically, these BMPs have provided the campus with excellent controls, preventing the discharge of storm water containing PCBs into the King County wastewater system.

As a further indicator of the efficacy of these practices, additional grab-samples, obtained by our third-party laboratory (LVL Labs) on November 15, 2017, were tested and came back as "Non-Detect" for PCBs.

A copy of this report is attached for your review, and will also be included as our exhibit for our Semi-Annual Self-Monitoring Report, 2nd Semester 2017.

Please feel free to contact me at this email address or at 206-963-6656 should you have any questions.

Sincerely;



**Doug Lansing**

Project Manager

Rainier Commons LLC





## King County

**Wastewater Treatment Division**  
Industrial Waste Program  
Department of Natural Resources and Parks  
201 South Jackson Street, Suite 513  
Seattle, WA 98104-3855  
**206-477-5300** Fax 206-263-3001  
TTY Relay: 711

November 2, 2017

Shimon Mizrahi  
Rainier Commons LLC  
918 S. Horton Street, Suite 1018  
Seattle, WA 98134

### **Warning Notice for Permit No. 7927-01**

Dear Mr. Shimon Mizrahi:

Results from King County's recent sampling indicate that the wastewater from Rainier Commons LLC - Old Rainier Brewery Site, although in compliance, is so close to the discharge limit that future samples may exceed those limits. We recommend that you take immediate action to ensure that your wastewater meets discharge limits. The results of the sample(s) taken on October 18, 2017, are enclosed.

If you have any questions, please call me at 206-477-5426 or email me at [todd.gowing@kingcounty.gov](mailto:todd.gowing@kingcounty.gov).

Sincerely,

Todd Gowing  
Compliance Investigator

Enclosure(s)

**RCLLC 0012942**

## Rainier Commons LLC - Old Rainier Brewery Site

### Metals

**Site #** IW1056A - MH near SE corner of Bldg along Airport Way S  
**Sample Date** 18-Oct-2017 **Discharge Rate** NA  
**Sample #** L68856-1 **Time Span** NA Hour(s)  
**Sample Code** Grab **Start Time** 1250

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Arsenic, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Cadmium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Chromium, Total, ICP		.0155	mg/L	Compliance	NA		NA
Copper, Total, ICP		.0581	mg/L	Compliance	NA		NA
Lead, Total, ICP		.352	mg/L	Compliance	NA		NA
Nickel, Total, ICP		<RDL .024	mg/L	Compliance	NA		NA
Silver, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Zinc, Total, ICP		.619	mg/L	Compliance	NA		NA

### PCB's

**Site #** IW1056A - MH near SE corner of Bldg along Airport Way S  
**Sample Date** 18-Oct-2017 **Discharge Rate** NA  
**Sample #** L68856-2 **Time Span** NA  
**Sample Code** Grab **Start Time** 1250

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Aroclor 1016	12674-11-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1221	1104-28-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1232	11141-16-5	<MDL	ug/L	Compliance	NA		NA
Aroclor 1242	53469-21-9	<MDL	ug/L	Compliance	NA		NA
Aroclor 1248	12672-29-6	<MDL	ug/L	Compliance	NA		NA
Aroclor 1254	11097-69-1	<RDL .059	ug/L	Compliance	NA		NA
Aroclor 1260	11096-82-5	<MDL	ug/L	Compliance	NA		NA

A Less than Method Detection Limit; <RDL=Less than Reporting Detection Limit; NA=Not Applicable; H=Sample handling criteria compromised; R=Data judged unusable.  
 B Oil contamination observed; E=Estimated value; TA=Text information available which qualifies data; SGT=Nonpolar Oil Result, Silica Gel Treated.

## Rainier Commons LLC - Old Rainier Brewery Site

### Metals

**Site #** IW1056B - MH near NE corner of Bldg 2 on N side of site  
**Sample Date** 18-Oct-2017 **Discharge Rate** NA  
**Sample #** L68857-1 **Time Span** NA  
**Sample Code** Grab **Start Time** 1320

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Arsenic, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Cadmium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Chromium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Copper, Total, ICP		.0227	mg/L	Compliance	NA		NA
Lead, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Nickel, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Silver, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Zinc, Total, ICP		.23	mg/L	Compliance	NA		NA


### PCB's

**Site #** IW1056B - MH near NE corner of Bldg 2 on N side of site  
**Sample Date** 18-Oct-2017 **Discharge Rate** NA  
**Sample #** L68857-2 **Time Span** NA  
**Sample Code** Grab **Start Time** 1320

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Aroclor 1016	12674-11-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1221	1104-28-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1232	11141-16-5	<MDL	ug/L	Compliance	NA		NA
Aroclor 1242	53469-21-9	<MDL	ug/L	Compliance	NA		NA
Aroclor 1248	12672-29-6	<MDL	ug/L	Compliance	NA		NA
Aroclor 1254	11097-69-1	<RDL .094	ug/L	WARNING	NA		NA
Aroclor 1260	11096-82-5	<RDL .071	ug/L	Compliance	NA		NA

<f Less than Method Detection Limit; <RDL=Less than Reporting Detection Limit; NA=Not Applicable; H=Sample handling criteria compromised; R=Data judged unusable.  
 B Back contamination observed; E=Estimated value; TA=Text information available which qualifies data; SGT=Nonpolar Oil Result, Silica Gel Treated.

## Rainier Commons BMP Report

 **Doug Lansing**

Thu 7/6/2017 7:54 AM

To: Arnaud Girard <arnaud.girard@kingcounty.gov>; info.KCIW@kingcounty.gov <info.KCIW@kingcounty.gov>;

Cc: Jo Flannery <flannery@ryanlaw.com>;

1 attachments (7 MB)


King County BMP Report 2017-1.pdf;

Good Morning Arnaud:

Attached, please find the 2017 first-half report on Rainer Commons' Best Management Practices (BMPs), demonstrating the effectiveness of our control activities, during our PCB abatement process.

Please don't hesitate to call if you have any questions.

Sincerely:

 **Doug Lansing**  
Project Manager  
Rainer Commons LLC>

**Rainier Commons LLC**  
**Semiannual Report on Compliance with Best Management Practices for the Control of PCB-Bearing Solids**

**Reporting Period: January 1, 2017 through June 30, 2017**

Rainier Commons, in accordance with the reporting requirements of King County Wastewater Discharge Permit # 7927-01, is pleased to submit the following report. This report is intended to demonstrate compliance with the reporting requirements of Permit Section S3.F. Specific permit reporting requirements are re-stated below, in italics; followed by Rainier Commons' response.

*1a. A summary of stormwater source control BMP activities conducted during the reporting period*

Please see Exhibit "A" (two pages) for a summary of Rainier Commons' source control BMP activities.

*1b. A summary of any additional source control and sampling/monitoring activities conducted during the reporting period in response to requirements specified by the Environmental Protection Agency (EPA) in its December 18, 2013, conditional approval of Rainier Commons' Work Plan for Exterior paint removal dated March 25, 2013, and any subsequent EPA approvals related to individual Phased Work Plans related to site building exterior paint removal phases*

No additional, EPA mandated sampling/monitoring activities were required during this reporting period. No additional abatement work performed, pending EPA approval of the next, proposed work phase.

*1c. An evaluation of how well the BMPs and/or pretreatment system functioned to minimize the discharge of PCBs into the sanitary sewer*

As evidenced by on-going sampling and testing by both Rainier Commons And King County Industrial Waste Program personnel, our site source control activities continue to provide a high degree of confidence in these actions, with a single, random test result reading barely above the Wastewater Screening Level. Subsequent testing re-confirmed "non-Detect" levels of PCBs.

*1d. A report on any operations and maintenance training conducted for employees that work at the site for the benefit of performing BMP activities, maintaining compliance with the permit, and continuing minimization of PCB discharges*

All Rainier Commons personnel involved with any work involving the handling materials potentially containing PCBs are re-trained annually and carry current "HAZWOPER" certifications.

*1e. A summary of all PCB results (self-monitoring and KCIW monitoring) that are greater than the screening limit of 0.1µg/L for that time period and corrective actions taken*

On February 15, 2017, KCIW laboratories reported a Grab sample result, from Site # IW1056A (Manhole #6), as being marginally higher than the Screening Level target established at 0.10 ug/L. Subsequent testing performed by Rainier Commons' laboratories on May 3, 2017 confirmed that PCB levels are below the Screening Level and found to be "Non-Detect". (Lab summaries attached)

Should any additional information be required, please contact the undersigned at (b) (6) or (b) (6)

Sincerely:

  
Doug Lansing  
Project Manager  
Rainier Commons LLC

**RCLLC 0012946**

## EXHIBIT "A"

### RAINIER COMMONS SOURCE CONTROL "CONTAINMENT PLAN"

#### Ongoing Maintenance:

It has been our ongoing practice to collect any and all loose paint chips from the exterior horizontal surfaces of the property. Prior to performing such work, all personnel must wear protective clothing and gear, including but not limited to ; glove, mask and/or any other equipment and attire required and deemed necessary by WISHA/L&I and/or EPA. All waste collected is stored in regulated containers, properly documented, characterized, tested, and transported and disposed of by qualified environmental firms.

#### Cleaning of Planting Strips and Roof Surfaces:

On an ongoing basis; designated and trained personnel inspect, hand pick, and vacuum (using HEPA filtered equipment) and paint chips that have fallen to the ground or roof surfaces. All material collected is documented and disposed of in designated and labeled PCB containing waste containers per EPA 40C.F.R. regulations.

#### Filter Socks on Roof Drains and Catch Basin Drains:

In conjunction with the above described work, a weekly inspection of all roof drains and catch basins is conducted. All such drains have been previously fitted and equipped with a filter fabric media so as to filter out debris and contaminants. During the weekly inspection; is deemed necessary and the debris has reached an appreciable quantity with the filter fabric; the worker will remove the drain grate, clean around the grate, and dispose of the debris and filter fabric in the same manner as described above. The work then re-fits the drain with either "Fiberweb Typar" Geo-Textile drain fabric, "Ultra Tech" Ultra-DrainGuard catch basin filters or a similar product. Once the fabric filter and debris have been removed and disposed of, Clean Harbors is notified for debris transport and disposal based on the current "profile" in place for such materials. Profile results are forwarded to the EPA, in connection with exterior work plan documents and reports.

#### Cleaning of Parking Lot and Walkway Surfaces:

On a consistent weekly basis McDonough and Sons, Inc. Sweeping Services power sweeps and vacuums the Rainier Commons parking lots and walkway surfaces reachable by vacuum truck. Debris from each sweeping is disposed of in a locked and properly labeled transportation container located on the west side of the property. Clean Harbors periodically collects representative samples of materials inside the transportation boxes. Once collected, these samples are transported to an independent laboratory for testing. Results are forwarded to the EPA, in connection with exterior work plan documents and reports.

#### Catch Basin Sediment Removal:

Generally on a quarterly basis, Rainier Commons removes sediment from its catch basins. The catch basin filter socks are removed and replaces as described above. During this cycle, if sediments are observed to be accumulating in the bottom of the catch basins the sediment is removed through the use of hand tools and suction via Hepa-filtered shop vacuums. The sediment is then placed in the locked box in the designated and signed hazardous material storage area, for characterization and proper disposal.

## *EXHIBIT "A"*

### **Enhanced Site Source Control Actions**

#### **Calendar Year 2017**

As a continuation of our enhanced site source control program, which began September 15, 2014, a two-man crew will continue to perform control activities, including:

- Multiple rounds of cleaning and vacuuming on the roofs of Buildings 24, 1, 2, 3, 26, 5A, 22, 25, 6, 7, 18, 9, 14, and 15.
- Install/replace roof drain filters on all roofs cleaned, as needed, based on frequency and severity of rain events
- Ongoing change-out of roof filters, daily, during rain events
- Multiple cycles of hand vacuuming the parking lot and courtyard with hepa-filter vacuums
- Catch Basins cleaned of sediments, as needed, on a quarterly basis
- Hand removal and disposal of flaking paint from exterior walls to prevent introduction of PCBs into the storm water system
- Monthly change-out of HEPA filters used during Control activities

These enhanced activities, in conjunction with our other on-going maintenance activities, continue to provide for a very effective system of controls for PCB-laden paint, as evidenced by our catch basin sampling results.

## Rainier Commons LLC - Old Rainier Brewery Site

### Metals

**Site #** IW1056A - MH near SE corner of Bldg along Airport Way S  
**Sample Date** 15-Feb-2017 **Discharge Rate** NA  
**Sample #** L67135-1 **Time Span** NA Hour(s)  
**Sample Code** Grab **Start Time** 1020

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Arsenic, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Cadmium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Chromium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Copper, Total, ICP		.0426	mg/L	Compliance	NA		NA
Lead, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Nickel, Total, ICP		<RDL .0059	mg/L	Compliance	NA		NA
Silver, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Zinc, Total, ICP		.14	mg/L	Compliance	NA		NA

### PCB's

**Site #** IW1056A - MH near SE corner of Bldg along Airport Way S  
**Sample Date** 15-Feb-2017 **Discharge Rate** NA  
**Sample #** L67135-2 **Time Span** NA Hour(s)  
**Sample Code** Grab **Start Time** 1020

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Aroclor 1016	12674-11-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1221	1104-28-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1232	11141-16-5	<MDL	ug/L	Compliance	NA		NA
Aroclor 1242	53469-21-9	<MDL	ug/L	Compliance	NA		NA
Aroclor 1248	12672-29-6	<MDL	ug/L	Compliance	NA		NA
Aroclor 1254	11097-69-1	<RDL .2	ug/L	NOV	NA		NA
Aroclor 1260	11096-82-5	<RDL .12	ug/L	NOV	NA		NA

=Less than Method Detection Limit; <RDL=Less than Reporting Detection Limit; NA=Not Applicable; H=Sample handling criteria compromised; R=Data judged unusable.  
 Blank contamination observed; E=Estimated value; TA=Text information available which qualifies data; SGT=Nonpolar Oil Result, Silica Gel Treated.





**Fremont**  
ANALYTICAL

## Analytical Report

Work Order: 1705033  
Date Reported: 5/9/2017

Client: NVL Labs, Inc.

Collection Date: 5/3/2017 9:05:00 AM

Project: Rainier Commons

Lab ID: 1705033-001

Matrix: Stormwater

Client Sample ID: 5317-MH6-PCB

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Polychlorinated Biphenyls (PCB) by EPA 8082</b>				Batch ID: 16942		Analyst: SG
Aroclor 1016	ND	0.0997		µg/L	1	5/4/2017 6:51:17 PM
Aroclor 1221	ND	0.0997		µg/L	1	5/4/2017 6:51:17 PM
Aroclor 1232	ND	0.0997		µg/L	1	5/4/2017 6:51:17 PM
Aroclor 1242	ND	0.0997		µg/L	1	5/4/2017 6:51:17 PM
Aroclor 1248	ND	0.0997		µg/L	1	5/4/2017 6:51:17 PM
Aroclor 1254	ND	0.0997		µg/L	1	5/4/2017 6:51:17 PM
Aroclor 1260	ND	0.0997		µg/L	1	5/4/2017 6:51:17 PM
Aroclor 1262	ND	0.0997		µg/L	1	5/4/2017 6:51:17 PM
Aroclor 1268	ND	0.0997		µg/L	1	5/4/2017 6:51:17 PM
Total PCBs	ND	0.0997		µg/L	1	5/4/2017 6:51:17 PM
Surr: Decachlorobiphenyl	30.5	23.1-172		%Rec	1	5/4/2017 6:51:17 PM
Surr: Tetrachloro-m-xylene	31.0	10-125		%Rec	1	5/4/2017 6:51:17 PM



## Analytical Report

Work Order: 1705033  
Date Reported: 5/9/2017

Client: NVL Labs, Inc.

Collection Date: 5/3/2017 9:15:00 AM

Project: Rainier Commons

Lab ID: 1705033-002

Matrix: Stormwater

Client Sample ID: 5317-MH6-Pb

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b>Total Metals by EPA Method 200.8</b>				Batch ID: 16954		Analyst: TN
Lead	2.16	0.500		µg/L	1	5/4/2017 1:44:48 PM



**King County**

**Wastewater Treatment Division**

Industrial Waste Program

Department of Natural Resources and Parks

201 South Jackson Street, Suite 513

Seattle, WA 98104-3855

**206-477-5300** Fax 206-263-3001

TTY Relay: 711

SENT ATTACHED  
FORMS 6-28-17  
TO ARNAUD & EMAIL  
BELOW.

June 5, 2017

Shimon Mizrahi  
Rainier Commons LLC  
918 S. Horton Street, Suite 1018  
Seattle, WA 98134

Semiannual Self-Monitoring Report due July 15, 2017

Dear Shimon Mizrahi:

This letter is to remind you that the Rainier Commons LLC - Old Rainier Brewery Site wastewater discharge authorization requires semiannual reporting of your monitoring results by July 15, 2017. Please consult your Permit No. 7927-01 for the specific monitoring requirements.

Failure to submit the required report on time could result in enforcement action, including an advertisement of the reporting violation in the display ad placed in *The Seattle Times* by the King County Department of Natural Resources and Parks.

You must use a King County self-monitoring form to submit results unless an alternate form is approved by King County. If no discharge has occurred during the sampling period, the report shall be submitted notifying King County that no discharge has occurred.

Your report should be sent to [info.KCIW@kingcounty.gov](mailto:info.KCIW@kingcounty.gov). Alternatively, reports can be mailed to King County Industrial Waste Program, 201 South Jackson Street, Suite 513, Seattle, Washington 98104-3855.

If you have any questions about this notice or need a copy of the form, please contact Arnaud Girard at 206-477-5440 or [arnaud.girard@kingcounty.gov](mailto:arnaud.girard@kingcounty.gov).

Sincerely,

Despina Strong  
Program Manager

**RCLLC 0012952**



King County

# Industrial Waste Program Semi-Annual Monitoring Report

Send to: King County Industrial Waste Program  
201 S. Jackson Street, Suite 100  
Seattle, WA 98104-3855  
Phone 206-477-5300 / FAX 206-263-3001  
Email: info.KCIW@kingcounty.gov

Company Name: Rainier Commons LLC

This form is available at [www.kingcounty.gov/industrialwaste](http://www.kingcounty.gov/industrialwaste).

Please specify year: 2017 Semi-Annual Report for Semester 1 Sample Site No.: IW1056A Permit/DA No.: 7927-01

	Sample Date month/day	Sample Type C (Composite) G (Grab)	Aroclor 1016 (µg/L)	Aroclor 1221 (µg/L)	Aroclor 1232 (µg/L)	Aroclor 1242 (µg/L)	Aroclor 1248 (µg/L)	Aroclor 1254 (µg/L)	Aroclor 1260 (µg/L)	Lead (Pb) (mg/L)
Semester 1	Jan/									
	Feb/ <u>8</u>	<u>G</u>	<u>N/D</u>						<u>N/D</u>	<u>.00357</u>
	Mar/									
	Apr/									
	May/ <u>3</u>	<u>G</u>	<u>N/D</u>						<u>N/D</u>	<u>.00216</u>
	Jun/									

NOTES:  
\* REPORTING LIMIT FOR PCBs = 0.0999 µg/L  
\* REPORTING LIMIT FOR PCBs = 0.0997 µg/L

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Signature of Principal Executive or Authorized Agent: [Signature] Date: 6-28-17

RCLLC 0012953

**Due Date:** Semi-annual report for Semester 1 is due by July 15 each year. **Please Note:** Do not include original laboratory reports with this form unless otherwise requested. Keep the original laboratory reports on file and available for inspection for at least three years.



# Industrial Waste Program Semi-Annual Monitoring Report

Send to: King County Industrial Waste Program  
201 S. Jackson Street, Suite 100  
Seattle, WA 98104-3855  
Phone 206-477-5300 / FAX 206-263-3001  
Email: info.KCIW@kingcounty.gov

Company Name: Rainier Commons LLC

This form is available at [www.kingcounty.gov/industrialwaste](http://www.kingcounty.gov/industrialwaste).

Please specify year: 2017 Semi-Annual Report for Semester 1

Sample Site No.: IW1056B

Permit/DA No.: 7927-01

	Sample Date month/day	Sample Type C (Composite) G (Grab)	Aroclor 1016 (µg/L)	Aroclor 1221 (µg/L)	Aroclor 1232 (µg/L)	Aroclor 1242 (µg/L)	Aroclor 1248 (µg/L)	Aroclor 1254 (µg/L)	Aroclor 1260 (µg/L)	Lead (Pb) (mg/L)	
Semester 1	Jan/____										
	Feb/ <u>8</u>	<u>G</u>	<u>N/D</u>	<u>[Handwritten line across cells]</u>						<u>N/D</u>	<u>.00144</u>
	Mar/____										
	Apr/____										
	May/____										
	Jun/____										

NOTES: REPORTING LIMIT FOR PCBs = 0.0999 µg/L

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

[Signature]  
Signature of Principal Executive or Authorized Agent

6-28-17  
Date

**Due Date:** Semi-annual report for Semester 1 is due by July 15 each year. **Please Note:** Do not include original laboratory reports with this form unless otherwise requested. Keep the original laboratory reports on file and available for inspection for at least three years.

RCLLC 0012954

. Submit a written report within 14 days of the event (14-Day Report) describing the breakdown, the actual quantity and quality of resulting waste discharged, corrective action taken, and the steps taken to prevent a recurrence.

Please submit a 14-Day Report for failure to collect required samples as soon as possible. Please use the following form: [http://www.kingcounty.gov/~media/services/environment/wastewater/industrial-waste/forms-logs/Other/14\\_day\\_report\\_form\\_with\\_certifying\\_language.ashx?la=en](http://www.kingcounty.gov/~media/services/environment/wastewater/industrial-waste/forms-logs/Other/14_day_report_form_with_certifying_language.ashx?la=en)

14-DAY REPORT

Rainier Commons' Discharge Evaluation

Doug Lansing

Girard, Arnaud (arnaud.girard@kingcounty.gov); Jo Flannery (flannery@ryanlaw.com)

Good Morning Arnaud:

I had received and read your email regarding fees for my permit, and realized I didn't respond regarding area calculation revisions. I generally concur with your initial calculations.

I have "red-lined" our Exhibits A & I to our permit application, reflecting our recent drainage flow revisions at the south end of the campus.

The revised exhibit is attached for your information.

Thanks:

Doug

## REVISED DRAINAGE FLOW

13,671 # TO SPU

$$13,671 / 199,070 = 0.0687 \text{ OR } 0.07$$

EXHIBITS A & I

$$\text{KING CO} - 60\% - 7\% = 53\%$$

$$\text{SPU} - 40\% + 7\% = 47\%$$

### STORMWATER VOLUME CALCULATIONS:

The former Rainier Brewery property is an approximate 4.57-acre parcel.

Below are best estimate calculations for rainfall volumes and corresponding stormwater runoff volumes for the site. Only a portion of the site is served by the King County combined storm/sewer system. The estimated ratio of stormwater draining to City of Seattle utilities versus King County system is also calculated below.

4.57 Acre = 199,070 sf

There are a few landscaped and unpaved areas around buildings. The site is largely developed with buildings and hardscape.

Calculations make the assumption that 90% of the rainwater will runoff the site per discussions with King County.

Total area calculation for runoff is as follows:  $199,070 \times 0.9 = 179,163 \text{ sq ft}$

- Max Volume =  $179,163 \text{ sf} \times (2" / 12) = 29,860 \text{ cubic ft} = 1,105 \text{ cubic yards} = 223,372 \text{ gallons}$

The average volume will be calculated as follows:

$$3 \text{ feet} / 365 \text{ days} = 0.00821 \text{ feet/day}$$

- Average Volume =  $179,163 \text{ sf} \times 0.00821 \text{ ft/day} = 1,470 \text{ cubic ft/day} = 11,003 \text{ gallons per day}$

Using the Catch Basin Study prepared by CDM, dated January 2009 (courtesy copy attached) and the City of Seattle site map titled Tully's Area CB Sediment Samples (courtesy copy attached) we estimate that 47 percent of the stormwater runoff is collected by the City of Seattle system, which is located on and drains to the north end and portions of the west of the site, and we estimate 53 percent is collected by the King County system, which drains the center and south end of the site.

Maximum volume estimate King County center and south pipes:

$$0.53 \times 223,372 \text{ gallons} = 118,387 \text{ gallons}$$

Average volume estimate King County center and south pipes:

$$0.53 \times 11,003 \text{ gallons/day} = 5,832 \text{ gallons per day on average}$$

*[Signature]* 5-5-2017





**King County**

**Wastewater Treatment Division**

Industrial Waste Program

Department of Natural Resources and Parks

201 South Jackson Street, Suite 513

Seattle, WA 98104-3855

**206-477-5300** Fax 206-263-3001

TTY Relay: 711

April 4, 2017

CERTIFIED MAIL  
RETURN RECEIPT REQUESTED

Shimon Mizrahi  
Rainier Commons LLC  
918 S. Horton Street, Suite 1018  
Seattle, WA 98134

**Notice of Screening Level Exceedance**

Dear Mr. Mizrahi:

Results from the King County Industrial Waste Program's (KCIW) recent sampling indicate that wastewater discharged by Rainier Commons LLC - Old Rainier Brewery Site exceeded screening levels. The results of the sample(s) taken on February 15, 2017 are enclosed.

According to Section S3.D.2 of your KCIW Permit, Rainier Commons LLC must:

1. Collect a sample at the subject sample site and submit new data to KCIW within 14 days of becoming aware of the exceedance (or the next time discharge occurs if greater than 14 days).
2. Submit a written report (*14-Day Report*) within 14 days of your receipt of this notice. The report should explain the cause of the exceedance and corrective actions taken to respond to the exceedance and ensure ongoing compliance.

If you have any questions, please call me at 206-477-5440 or email me at [arnaud.girard@kingcounty.gov](mailto:arnaud.girard@kingcounty.gov).

Sincerely,

Arnaud Girard  
Compliance Investigator

Enclosure(s)

cc: Julie Howell, Seattle Public Utilities

**RCLLC 0012958**

## Rainier Commons LLC - Old Rainier Brewery Site

### Metals

**Site #** IW1056A - MH near SE corner of Bldg along Airport Way S  
**Sample Date** 15-Feb-2017 **Discharge Rate** NA  
**Sample #** L67135-1 **Time Span** NA Hour(s)  
**Sample Code** Grab **Start Time** 1020

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Arsenic, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Cadmium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Chromium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Copper, Total, ICP		.0426	mg/L	Compliance	NA		NA
Lead, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Nickel, Total, ICP		<RDL .0059	mg/L	Compliance	NA		NA
Silver, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Zinc, Total, ICP		.14	mg/L	Compliance	NA		NA

### PCB's

**Site #** IW1056A - MH near SE corner of Bldg along Airport Way S  
**Sample Date** 15-Feb-2017 **Discharge Rate** NA  
**Sample #** L67135-2 **Time Span** NA Hour(s)  
**Sample Code** Grab **Start Time** 1020

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Aroclor 1016	12674-11-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1221	1104-28-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1232	11141-16-5	<MDL	ug/L	Compliance	NA		NA
Aroclor 1242	53469-21-9	<MDL	ug/L	Compliance	NA		NA
Aroclor 1248	12672-29-6	<MDL	ug/L	Compliance	NA		NA
Aroclor 1254	11097-69-1	<RDL .2	ug/L	NOV	NA		NA
Aroclor 1260	11096-82-5	<RDL .12	ug/L	NOV	NA		NA

=Less than Method Detection Limit; <RDL=Less than Reporting Detection Limit; NA=Not Applicable; H=Sample handling criteria compromised; R=Data judged unusable.  
 b=blank contamination observed; E=Estimated value; TA=Text information available which qualifies data; SGT=Nonpolar Oil Result, Silica Gel Treated.

## Rainier Commons LLC - Old Rainier Brewery Site

### Metals

**Site #** IW1056B - MH near NE corner of Bldg 2 on N side of site  
**Sample Date** 15-Feb-2017 **Discharge Rate** NA  
**Sample #** L67136-1 **Time Span** NA  
**Sample Code** Grab **Start Time** 955

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Arsenic, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Cadmium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Chromium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Copper, Total, ICP		<RDL .0079	mg/L	Compliance	NA		NA
Lead, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Nickel, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Silver, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Zinc, Total, ICP		.156	mg/L	Compliance	NA		NA

### PCB's

**Site #** IW1056B - MH near NE corner of Bldg 2 on N side of site  
**Sample Date** 15-Feb-2017 **Discharge Rate** NA  
**Sample #** L67136-2 **Time Span** NA  
**Sample Code** Grab **Start Time** 955

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Aroclor 1016	12674-11-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1221	1104-28-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1232	11141-16-5	<MDL	ug/L	Compliance	NA		NA
Aroclor 1242	53469-21-9	<MDL	ug/L	Compliance	NA		NA
Aroclor 1248	12672-29-6	<MDL	ug/L	Compliance	NA		NA
Aroclor 1254	11097-69-1	<MDL	ug/L	Compliance	NA		NA
Aroclor 1260	11096-82-5	<MDL	ug/L	Compliance	NA		NA

=Less than Method Detection Limit; <RDL=Less than Reporting Detection Limit; NA=Not Applicable; H=Sample handling criteria compromised; R=Data judged unusable.  
 B=Blank contamination observed; E=Estimated value; TA=Text information available which qualifies data; SGT=Nonpolar Oil Result, Silica Gel Treated.

EPA

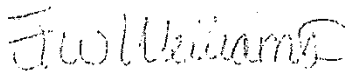
6-24-2014

- 4) Upon exceedances of an action level of  $0.05 \text{ mg/m}^3$  PM-10 particulates, Rainier Commons must report within 24 hours such exceedances to the EPA Project Manager according to Condition 22 of the December 18, 2013, risk-based disposal approval. Based on this information, the EPA Project Manager will evaluate the significance of the reported exceedances, and direct Rainier Commons to take such steps as appropriate according to Condition 21 of the RBDA.

The  $0.05 \text{ mg/m}^3$  action level specified in Condition 4 is based on the existing  $0.001 \text{ mg/m}^3$  NIOSH REL standard for PCBs in the air, and an assumed upper bound of  $20,000 \text{ mg/kg}$  PCBs in dust particulate, generally consistent with the documented maximum concentration of PCBs at the Rainier Commons facility. Due to the lack of opportunity to complete a more detailed review and analysis of the proposed change, EPA is electing to establish this limit as an action level, without any detailed specification of specific response actions. Depending on EPA's review of the action level exceedances, EPA may require Rainier Commons to verify the exceedances, conduct an evaluation of potential causes of the exceedances, or take such other measures, including but not limited to requiring temporary cessation of media blasting activities, as necessary to ensure no unreasonable risk of injury to health or the environment. Because this action level is a conservative bounding limit, air monitoring indicating total particulate levels below the action level will not pose an unreasonable risk of injury to health or the environment.

If you have any questions or comments, please feel free to contact Michelle Mullen at 206-553-1616 or by email at [mullin.michelle@epa.gov](mailto:mullin.michelle@epa.gov).

Sincerely,



for  
Kelly McFadden, Manager  
Pesticides and Toxics Unit

cc via email: Dan Cargill, Washington State Department of Ecology

Jo M. Flannery, Ryan, Swanson, Cleveland, PLLC

Arnaud Girad, King County Industrial Wastewater Program

Vered Misrahi, Rainier Commons, LLC

Michelle Mullen, U.S. Environmental Protection Agency

Beth Schmoyer, Seattle Public Utilities

Richard Thomas, Washington State Department of Ecology

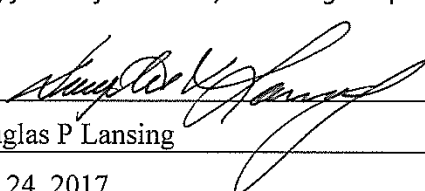
Bruce Tiffany, King County Industrial Wastewater Program

RCLLC 0012961



## Industrial Waste Program 14-Day Report for Discharge or Permit Violation

For more information on reporting requirements, refer to your Permit, Section S4.D. If you have a Major/Minor Discharge Authorization, refer to General Condition D.

<b>Date:</b> April 24, 2017	<b>Permit/Authorization number:</b> 7927-01
<b>Company/Agency name:</b> Rainier Commons LLC	
<b>Sample site number:</b> IW1056A	
<b>1. Description and cause of noncompliance event:</b> (Include dates, times, locations, sample results, and estimated gallons discharged) Please see attached	
<b>2. Date and time King County notified:</b> (Requirement is within 24 hours of learning of violation unless event was spill or slug discharge then must have notified immediately) Screening Level exceedance reported by King County. Received by Rainier Commons on April 20, 2017.	
<b>3. Corrective actions taken to respond to the violation and ensure ongoing compliance:</b> Please see attached	
<b>4. If discharge violation, enter follow-up sample collection date and results:</b> (May use subsequent self-monitoring sample if collected and analyzed within 14 days of learning of violation) Please see attached	
<b>Additional sheets attached:</b> <input checked="" type="checkbox"/> YES or <input type="checkbox"/> NO	
<p><i>I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i></p> <p><b>Signature:</b> </p> <p><b>Name:</b> Douglas P Lansing</p> <p><b>Date:</b> April 24, 2017</p> <p><b>Title:</b> Project Manager</p> <p><b>Person signing above is:</b> (choose one) <input type="checkbox"/> Authorized Representative <input checked="" type="checkbox"/> Delegated Authorized Representative*</p> <p><small>*All user reports must be signed by an authorized representative of the industrial user. "Authorized representative of industrial user" is defined by King County Code 28.82.050. If you are delegated, a current <u>Delegation of Signatory Authority</u> must be on file at King County or completed and attached to this form.</small></p>	

**Please return this form and attachments to:**  
King County Industrial Waste Program  
201 S. Jackson Street, Suite 513, Seattle, WA 98104-3855  
Fax: 206-263-3001  
Email: [info.KCIW@kingcounty.gov](mailto:info.KCIW@kingcounty.gov)

**RCLLC 0012962**

## King County Wastewater Discharge Permit 7927-01

### 14-Day Report, initiated April 24, 2017

**Description and cause of noncompliance event:** On April 20, 2017, Rainier Commons LLC received notification from King County Wastewater Treatment Division that a grab sample collected from sampling site IW1056A (our Manhole #6) tested slightly higher than the established Screening Level of 0.1 ug/L for PCBs, at 0.14 ug/L.

The Screening Level applied to this permit was established as the testing procedure's Method Detection Limit (MDL), which is quite restrictive. The logic for this decision, as we understood it while we were going through the permitting process, is to have the Screening Level act as an "early warning indicator" of possible changes to our Site Source Control processes, rather than representing a regulatory threshold such as would be established for a business that was actually producing industrial waste as opposed to monitoring rainwater deposition and run-off. As the County is aware, background levels of PCBs in the environment can cause exceedances from off-site deposition of airborne contaminants, which is out of Rainier Commons' control. Nonetheless, we have reviewed and assessed our numerous site source control practices to ensure on-going BMPs.

**Corrective actions taken to respond to the exceedance and ensure ongoing compliance:** Your report to us of the slight Screening Level exceedance triggered an immediate evaluation of our current Site Source Control procedures (a copy of which was attached to our *Semiannual Report on Compliance with Best management Practices for the Control of PCB-Bearing Solids*).

Site Source Control procedures in use on the site have been extremely effective in limiting PCBs from entering stormwater and the combined sewer system. Both King County and Rainier Commons' test results, stretching back as far as late 2014, have shown very positive results with PCB levels below the Screening Level.

While our procedures have proven their efficacy, we continuously review processes for possible improvements. We recently added a mandatory change-out date for all HEPA filters used during our source control work. Cordless vacuums are employed to collect dust/debris along the periphery of catch basin and manhole covers, prior to their removal for filter sock changes. These vacuums are then utilized to perform a final cleaning of the area prior to cover reinstallation. By establishing a change-out date for these vacuum filters, we can ensure the filters function within their intended superior performance standards.

**Pending follow-up sample collection date and results:** Rainier Commons directed their independent testing laboratory to obtain an additional grab sample for Manhole #6. Again, we are not producing any industrial waste water from any process that we control. We are monitoring rainwater deposition. We are, therefore, at the mercy of the weather to receive

adequate rainfall to create sufficient stormwater volumes in the sampling location. While we have had some rains even our "impervious" surfaces are porous and obviously absorb some of the rainfall. Between absorption and natural rates of evaporation we have not yet had the opportunity to collect a sample. We have provided updates to the County regarding our efforts to stand ready to pull a sample when sufficient aqueous accumulations (accumulated stormwater) are present.

**Sampling Update as of May 3, 2017:** At 0800, today, May 3, 2017, Rainier Commons conducted an inspection of the flow rate of stormwater passing through Manhole #6. It was determined, based on the previous 24-hour period's rainfall and this visual inspection, that a significant rain event had occurred and that there was sufficient water passing through the Manhole to obtain an aqueous sample. NVL Laboratories arrived on-site at 0900 and obtained three liters of aqueous solution from the Manhole, for analysis for PCBs and Lead. Rainier Commons requested and five-day TAT for the analysis, and will provide these results under separate cover.

## Stormwater Drainage Evaluation

Rainier Commons, LLC  
3100 Airport Way South  
Seattle, WA 98134

Permit Number: 7927-01  
Permit Section: S3.B

Attn: Mr. Arnaud Girard  
Compliance Investigator  
King County Wastewater Treatment Division  
Industrial Waste Program

Dear Mr. Girard;

Please accept this cover letter and the attached Site Surface Water Drainage Flow Map (pdf format) as Rainier Commons' response to the Reference permit's requirement to provide a Stormwater Drainage Evaluation (Section S3.B).

The attached map (titled drain site plan 3-8-2017) is a culmination of work previously performed by others (CDM initial mapping of site – drawing dated January 2009 and revisions thereto), field observations of current configuration, dye-testing of select discharge points, and a review of historical civil drawings.

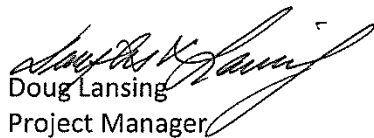
Our comprehensive analysis determined that 13,671 sq/ft of roof space was previously presumed to outflow into King County combined sewer/storm, discharging at Manhole #6 at the south end of the campus. As shown on the attached map, this surface area is actually outflowing to Seattle Public Utilities storm system, discharging to the south campus at Catch Basin #9. This roof space is depicted in green on the map and includes all or a portion of Buildings 15, 18, and 25.

The map also depicts the location of KCIW-designated sample sites IW1056A and IW1056B (in red), as well as the unrelated, new construction work to our immediate south (in light blue).

Future Wastewater Discharge Permit applications will reflect this lower, revised square footage calculation.

I would like to thank you, and Mr. Tim Coffey, for your assistance in preparing this plan.

Sincerely:



Doug Lansing  
Project Manager

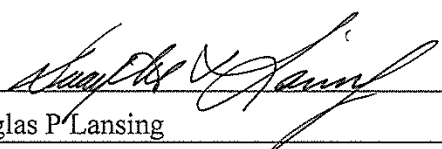
Rainier Commons LLC

RCLLC 0012965





## Industrial Waste Program Report Certification Statement

<b>Date:</b> 3-9-2017	<b>Permit/Authorization number:</b> 7927-01
<b>Company/Agency name:</b> Rainier Commons LLC.	
<b>Sample site number:</b> IW 1056A and B	
<b>Type of report attached:</b> (Choose one or indicate report next to "other") <input type="checkbox"/> 14-Day Report: Discharge or permit violation (Permit, Section S4 or Discharge Authorization, General Condition D) <input type="checkbox"/> 5-Day Report: Slug discharge or spill (Permit, Section S6) <input type="checkbox"/> Slug/Spill Control Plan (Permit, Section S6) <input type="checkbox"/> Best Management Practices (BMPs) Compliance Report (Permit, Section S3) <input type="checkbox"/> Installation/Upgrade of Pretreatment System Report (Permit, Section S6) <input type="checkbox"/> 90-Day Compliance Report (Permit, Section S11) <input type="checkbox"/> Pretreatment System Operation and Maintenance (O&M) Manual (As required) <input checked="" type="checkbox"/> Other: Stormwater Drainage Evaluation	
<i>I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
<b>Signature:</b> 	
<b>Name:</b> Douglas P. Lansing	
<b>Date:</b> 3-9-2017	
<b>Title:</b>	
<b>Person signing above is:</b> (choose one) <input type="checkbox"/> Authorized Representative <input checked="" type="checkbox"/> Delegated Authorized Representative*	
<small>*All user reports must be signed by an authorized representative of the industrial user. "Authorized representative of industrial user" is defined by King County Code 28.82.050. If you are delegated, a current <u>Delegation of Signatory Authority</u> must be on file at King County or completed and attached to this form.</small>	

**Please return this form and attachments to:**  
King County Industrial Waste Program  
201 S. Jackson Street, Suite 513, Seattle, WA 98104-3855  
Fax: 206-263-3001  
Email: [info.KCIW@kingcounty.gov](mailto:info.KCIW@kingcounty.gov)

**RCLLC 0012966**



**Industrial Waste Program  
Delegation of Signature Form**

**Person Delegating Signature Authority**

By signing below, I certify that I am authorizing the following person(s) and/or position(s) to receive signature authority. I am an authorized representative for the company named below because I meet the following definition on the reverse page:

☐ A

☐ B

☒ C

☐ D

Shimon Mizrahi Name	7927-01 Permit or Authorization Number (if known)
Managing Partner Title	Rainier Commons, LLC Company Name
206-650-4987 Phone	3100 Airport Way S. Street Address
Shimon@Arieldevelopment.com Email	Seattle, WA 98134 City, State, and Zip
 Signature	2-7-2017 Date

**Person(s) and/ or Position(s) Receiving Signature Authority**

<b>1. Douglas P Lansing</b> Name or Position  Project Manager Title  Rainier Commons LLC Company Name  3100 Airport Way S. Street Address  Seattle, WA 98134 City, State, and Zip Code   Signature	<b>2.</b> Name or Position  Title  Company Name  Street Address Phone  City, State, and Zip Code Email  Signature
<b>3.</b> Name or Position  Title  Company Name  Street Address Phone  City, State, and Zip Code Email  Signature	<b>4.</b> Name or Position  Title  Company Name  Street Address Phone  City, State, and Zip Code Email  Signature

[illegible]

DATE	TIME	LOCATION	DESCRIPTION	STATUS
1/19/79	0845	CON-202	CON-202	CON-202
1/20/79	11:25	CON-202	CON-202	CON-202
1/21/79	0845	CON-202	CON-202	CON-202
1/22/79	0845	CON-202	CON-202	CON-202
1/23/79	0845	CON-202	CON-202	CON-202
1/24/79	0845	CON-202	CON-202	CON-202
1/25/79	0845	CON-202	CON-202	CON-202
1/26/79	0845	CON-202	CON-202	CON-202
1/27/79	0845	CON-202	CON-202	CON-202
1/28/79	0845	CON-202	CON-202	CON-202
1/29/79	0845	CON-202	CON-202	CON-202
1/30/79	0845	CON-202	CON-202	CON-202
1/31/79	0845	CON-202	CON-202	CON-202
2/1/79	0845	CON-202	CON-202	CON-202
2/2/79	0845	CON-202	CON-202	CON-202
2/3/79	0845	CON-202	CON-202	CON-202
2/4/79	0845	CON-202	CON-202	CON-202
2/5/79	0845	CON-202	CON-202	CON-202
2/6/79	0845	CON-202	CON-202	CON-202
2/7/79	0845	CON-202	CON-202	CON-202
2/8/79	0845	CON-202	CON-202	CON-202
2/9/79	0845	CON-202	CON-202	CON-202
2/10/79	0845	CON-202	CON-202	CON-202
2/11/79	0845	CON-202	CON-202	CON-202
2/12/79	0845	CON-202	CON-202	CON-202
2/13/79	0845	CON-202	CON-202	CON-202
2/14/79	0845	CON-202	CON-202	CON-202
2/15/79	0845	CON-202	CON-202	CON-202
2/16/79	0845	CON-202	CON-202	CON-202
2/17/79	0845	CON-202	CON-202	CON-202
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2/22/79	0845	CON-202	CON-202	CON-202
2/23/79	0845	CON-202	CON-202	CON-202
2/24/79	0845	CON-202	CON-202	CON-202
2/25/79	0845	CON-202	CON-202	CON-202
2/26/79	0845	CON-202	CON-202	CON-202
2/27/79	0845	CON-202	CON-202	CON-202
2/28/79	0845	CON-202	CON-202	CON-202
2/29/79	0845	CON-202	CON-202	CON-202
2/30/79	0845	CON-202	CON-202	CON-202
3/1/79	0845	CON-202	CON-202	CON-202
3/2/79	0845	CON-202	CON-202	CON-202
3/3/79	0845	CON-202	CON-202	CON-202
3/4/79	0845	CON-202	CON-202	CON-202
3/5/79	0845	CON-202	CON-202	CON-202
3/6/79	0845	CON-202	CON-202	CON-202
3/7/79	0845	CON-202	CON-202	CON-202
3/8/79	0845	CON-202	CON-202	CON-202
3/9/79	0845	CON-202	CON-202	CON-202
3/10/79	0845	CON-202	CON-202	CON-202
3/11/79	0845	CON-202	CON-202	CON-202
3/12/79	0845	CON-202	CON-202	CON-202
3/13/79	0845	CON-202	CON-202	CON-202
3/14/79	0845	CON-202	CON-202	CON-202
3/15/79	0845	CON-202	CON-202	CON-202
3/16/79	0845	CON-202	CON-202	CON-202
3/17/79	0845	CON-202	CON-202	CON-202
3/18/79	0845	CON-202	CON-202	CON-202
3/19/79	0845	CON-202	CON-202	CON-202
3/20/79	0845	CON-202	CON-202	CON-202
3/21/79	0845	CON-202	CON-202	CON-202
3/22/79	0845</			

## Rainier Commons' Discharge Evaluation



**Doug Lansing**

Thu 3/9/2017 12:01 PM

To: Arnaud Girard <arnaud.girard@kingcounty.gov>;

Cc: Jo Flannery <flannery@ryanlaw.com>;

1 attachments (2 MB)

Stormwater Drainage Evaluation Cover Letter.pdf;

Good Afternoon Arnaud:

Attached, please find our Stormwater Drainage Evaluation, as required by Permit #7927-01, Section S3.B.

Please don't hesitate to contact me, should you have any questions.

Thanks;

Doug





King County

# Industrial Waste Program Semi-Annual Monitoring Report

Send to: King County Industrial Waste Program  
201 S. Jackson Street, Suite 100  
Seattle, WA 98104-3855  
Phone 206-477-5300 / FAX 206-263-3001  
Email: info.KCIW@kingcounty.gov

Company Name: Rainier Commons LLC

This form is available at [www.kingcounty.gov/industrialwaste](http://www.kingcounty.gov/industrialwaste).

Please specify year: 2017 Semi-Annual Report for Semester 1 Sample Site No.: IW1056A Permit/DA No.: 7927-01

	Sample Date month/day	Sample Type C (Composite) G (Grab)	Aroclor 1016 (µg/L)	Aroclor 1221 (µg/L)	Aroclor 1232 (µg/L)	Aroclor 1242 (µg/L)	Aroclor 1248 (µg/L)	Aroclor 1254 (µg/L)	Aroclor 1260 (µg/L)	Lead (Pb) (mg/L)	<p>I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.</p>
Semester 2	Jul/____										
	Aug/____										
	Sep/____										
	Oct/____										
	Nov/____										
	2-8-17 Dec/17	G	N/D						N/D	.00357	

NOTES:

\* AS PREVIOUSLY DOCUMENTED IN EMAILS DATED 12-29-2016, 2-9-2017, AND "14-DAY REPORT" SENT 2-10-2017; THE RAINIER COMMONS CAMPUS DID NOT EXPERIENCE SUFFICIENT RAIN-FALL (AFTER PERMIT APPROVAL) TO OBTAIN REPRESENTATIVE SAMPLES IN CY 2016. NEXT AVAILABLE SAMPLING DATE WAS 2-8-2017.

- REPORTING LIMIT FOR PCBs = 0.0999 µg/L

- AS DIRECTED, THIS SAMPLE TO SERVE AS 2017 1<sup>ST</sup> SEMESTER REPORT

Signature of Principal Executive or Authorized Agent

Date

2-16-2017

RCLLC 0012970

**Due Date:** Semi-annual report for Semester 1 is due by July 15 each year. **Please Note:** Do not include original laboratory reports with this form unless otherwise requested. Keep the original laboratory reports on file and available for inspection for at least three years.



# Industrial Waste Program Semi-Annual Monitoring Report

Send to: King County Industrial Waste Program  
201 S. Jackson Street, Suite 100  
Seattle, WA 98104-3855  
Phone 206-477-5300 / FAX 206-263-3001  
Email: info.KCIW@kingcounty.gov

Company Name: Rainier Commons LLC

This form is available at [www.kingcounty.gov/industrialwaste](http://www.kingcounty.gov/industrialwaste).

Please specify year: 2016<sup>17</sup> Semi-Annual Report for Semester 1

Sample Site No.: IW1056B

Permit/DA No.: 7927-01

	Sample Date month/day	Sample Type C (Composite) G (Grab)	Aroclor 1016 (ug/L)	Aroclor 1221 (ug/L)	Aroclor 1232 (ug/L)	Aroclor 1242 (ug/L)	Aroclor 1248 (ug/L)	Aroclor 1254 (ug/L)	Aroclor 1260 (ug/L)	Lead (Pb) (mg/L)
Semester 2	Jul/____									
	Aug/____									
	Sep/____									
	Oct/____									
	Nov/____									
	<u>2-8-17</u> Dec/____ *	G	N/D							N/D

NOTES:  
\* AS PREVIOUSLY DOCUMENTED IN EMAILS DATED 12-29-2016, 2-9-2017, AND "14-DAY REPORT" SENT 2-10-2017; THE RAINIER COMMONS CAMPUIS DID NOT EXPERIENCE SUFFICIENT RAINFALL (AFTER PERMIT APPROVAL) TO OBTAIN REPRESENTATIVES SAMPLES IN CY 2016. NEXT AVAILABLE SAMPLING DATE WAS 2-8-2017  
- REPORTING LIMIT FOR PCBs = 0.0999 ug/L  
- AS DIRECTED, THIS SAMPLE TO SERVE AS 2017 1<sup>ST</sup> SEMESTER REPORT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. I further certify that all data requiring a laboratory analysis were analyzed by a Washington State Department of Ecology accredited laboratory for each parameter tested.

Signature of Principal Executive or Authorized Agent: [Signature] Date: 2-16-2017

**Due Date:** Semi-annual report for Semester 1 is due by July 15 each year. **Please Note:** Do not include original laboratory reports with this form unless otherwise requested. Keep the original laboratory reports on file and available for inspection for at least three years.

RCLLC 0012971



**Fremont**  
ANALYTICAL

3600 Fremont Ave. N.  
Seattle, WA 98103  
T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**NVL Labs, Inc.**  
Marcus Gladden  
4708 Aurora Ave. N.  
Seattle, WA 98103

**RE: 2012-494**  
**Work Order Number: 1702087**

February 15, 2017

**Attention Marcus Gladden:**

Fremont Analytical, Inc. received 4 sample(s) on 2/8/2017 for the analyses presented in the following report.

***Mercury by EPA Method 245.1***  
***Mercury by EPA Method 7471***  
***Polychlorinated Biphenyls (PCB) by EPA 8082***  
***Sample Moisture (Percent Moisture)***  
***Total Metals by EPA Method 200.8***  
***Total Metals by EPA Method 6020***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

Mike Ridgeway  
Laboratory Director

DoD/ELAP Certification #L2371, ISO/IEC 17025:2005  
ORELAP Certification: WA 100009-007 (NELAP Recognized)

Original

[www.fremontanalytical.com](http://www.fremontanalytical.com)

Page 1 of 25

**RCLLC 0012972**



# Fremont

ANALYTICAL

Date: 02/15/2017

**CLIENT:** NVL Labs, Inc.  
**Project:** 2012-494  
**Work Order:** 1702087

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1702087-001	2817-MH24	02/08/2017 12:30 PM	02/08/2017 5:05 PM
1702087-002	2817-MH6	02/08/2017 12:45 PM	02/08/2017 5:05 PM
1702087-003	2817-MH24CO-A	02/08/2017 1:00 PM	02/08/2017 5:05 PM
1702087-004	2817-MH24CO-S	02/08/2017 1:00 PM	02/08/2017 5:05 PM





## Case Narrative

WO#: 1702087

Date: 2/15/2017

---

**CLIENT:** NVL Labs, Inc.

**Project:** 2012-494

---

### I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

### II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

### III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.

Prep Comments for METHOD (PREP-PCB-S), SAMPLE (1702087-004A) required Acid Cleanup Procedure (Using Method No 3665A).

Prep Comments for METHOD (PREP-PCB-S), SAMPLE (1702087-004A) required Florisil Cleanup Procedure (Using Method No 3620C).



### Qualifiers:

- \* - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

### Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



**Fremont**  
ANALYTICAL

## Analytical Report

Work Order: 1702087

Date Reported: 2/15/2017

Client: NVL Labs, Inc.

Project: 2012-494

Lab ID: 1702087-001

Client Sample ID: 2817-MH24

Collection Date: 2/8/2017 12:30:00 PM

Matrix: Stormwater

*CORRECT LOCATION  
IS MH 28*

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Polychlorinated Biphenyls (PCB) by EPA 8082**

Batch ID: 16207

Analyst: WC

Aroclor 1016	ND	0.0999		µg/L	1	2/14/2017 3:50:00 PM
Aroclor 1221	ND	0.0999		µg/L	1	2/14/2017 3:50:00 PM
Aroclor 1232	ND	0.0999		µg/L	1	2/14/2017 3:50:00 PM
Aroclor 1242	ND	0.0999		µg/L	1	2/14/2017 3:50:00 PM
Aroclor 1248	ND	0.0999		µg/L	1	2/14/2017 3:50:00 PM
Aroclor 1254	ND	0.0999		µg/L	1	2/14/2017 3:50:00 PM
Aroclor 1260	ND	0.0999		µg/L	1	2/14/2017 3:50:00 PM
Aroclor 1262	ND	0.0999		µg/L	1	2/14/2017 3:50:00 PM
Aroclor 1268	ND	0.0999		µg/L	1	2/14/2017 3:50:00 PM
Total PCBs	ND	0.0999		µg/L	1	2/14/2017 3:50:00 PM
Surr: Decachlorobiphenyl	83.7	23.1-172		%Rec	1	2/14/2017 3:50:00 PM
Surr: Tetrachloro-m-xylene	79.7	10-125		%Rec	1	2/14/2017 3:50:00 PM

**Total Metals by EPA Method 200.8**

Batch ID: 16203

Analyst: TN

Lead	1.44	0.500		µg/L	1	2/14/2017 12:03:19 PM
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Original



## Analytical Report

Work Order: 1702087

Date Reported: 2/15/2017

Client: NVL Labs, Inc.

Collection Date: 2/8/2017 12:45:00 PM

Project: 2012-494

Lab ID: 1702087-002

Matrix: Stormwater

Client Sample ID: 2817-MH6

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<b><u>Polychlorinated Biphenyls (PCB) by EPA 8082</u></b>				Batch ID: 16207		Analyst: WC
Aroclor 1016	ND	0.100		µg/L	1	2/14/2017 4:14:00 PM
Aroclor 1221	ND	0.100		µg/L	1	2/14/2017 4:14:00 PM
Aroclor 1232	ND	0.100		µg/L	1	2/14/2017 4:14:00 PM
Aroclor 1242	ND	0.100		µg/L	1	2/14/2017 4:14:00 PM
Aroclor 1248	ND	0.100		µg/L	1	2/14/2017 4:14:00 PM
Aroclor 1254	ND	0.100		µg/L	1	2/14/2017 4:14:00 PM
Aroclor 1260	ND	0.100		µg/L	1	2/14/2017 4:14:00 PM
Aroclor 1262	ND	0.100		µg/L	1	2/14/2017 4:14:00 PM
Aroclor 1268	ND	0.100		µg/L	1	2/14/2017 4:14:00 PM
Total PCBs	ND	0.100		µg/L	1	2/14/2017 4:14:00 PM
Surr: Decachlorobiphenyl	107	23.1-172		%Rec	1	2/14/2017 4:14:00 PM
Surr: Tetrachloro-m-xylene	62.3	10-125		%Rec	1	2/14/2017 4:14:00 PM
<b><u>Total Metals by EPA Method 200.8</u></b>				Batch ID: 16203		Analyst: TN
Lead	3.57	0.500		µg/L	1	2/14/2017 12:14:11 PM

Original



## Analytical Report

Work Order: 1702087

Date Reported: 2/15/2017

Client: NVL Labs, Inc.

Collection Date: 2/8/2017 1:00:00 PM

Project: 2012-494

Lab ID: 1702087-003

Matrix: Wastewater

Client Sample ID: 2817-MH24CO-A

Analyses *28* Result RL Qual Units DF Date Analyzed

### Polychlorinated Biphenyls (PCB) by EPA 8082

Batch ID: 16207

Analyst: WC

Aroclor 1016	ND	0.100	µg/L	1	2/14/2017 4:49:00 PM
Aroclor 1221	ND	0.100	µg/L	1	2/14/2017 4:49:00 PM
Aroclor 1232	ND	0.100	µg/L	1	2/14/2017 4:49:00 PM
Aroclor 1242	ND	0.100	µg/L	1	2/14/2017 4:49:00 PM
Aroclor 1248	ND	0.100	µg/L	1	2/14/2017 4:49:00 PM
Aroclor 1254	ND	0.100	µg/L	1	2/14/2017 4:49:00 PM
Aroclor 1260	ND	0.100	µg/L	1	2/14/2017 4:49:00 PM
Aroclor 1262	ND	0.100	µg/L	1	2/14/2017 4:49:00 PM
Aroclor 1268	ND	0.100	µg/L	1	2/14/2017 4:49:00 PM
Total PCBs	ND	0.100	µg/L	1	2/14/2017 4:49:00 PM
Surr: Decachlorobiphenyl	27.7	23.1-172	%Rec	1	2/14/2017 4:49:00 PM
Surr: Tetrachloro-m-xylene	31.4	10-125	%Rec	1	2/14/2017 4:49:00 PM

### Mercury by EPA Method 245.1

Batch ID: 16199

Analyst: WF

Mercury	ND	0.100	µg/L	1	2/10/2017 5:28:17 PM
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### Total Metals by EPA Method 200.8

Batch ID: 16203

Analyst: TN

Arsenic	8.88	1.00	µg/L	1	2/14/2017 12:17:47 PM
Barium	180	0.500	µg/L	1	2/14/2017 12:17:47 PM
Cadmium	1.08	0.200	µg/L	1	2/14/2017 12:17:47 PM
Chromium	36.7	0.500	µg/L	1	2/14/2017 12:17:47 PM
Copper	106	0.500	µg/L	1	2/14/2017 12:17:47 PM
Lead	76.3	0.500	µg/L	1	2/14/2017 12:17:47 PM
Nickel	34.8	0.500	µg/L	1	2/14/2017 12:17:47 PM
Selenium	ND	1.00	µg/L	1	2/14/2017 12:17:47 PM
Silver	0.201	0.200	µg/L	1	2/14/2017 12:17:47 PM
Zinc	964	1.50	µg/L	1	2/14/2017 12:17:47 PM

Original



# Fremont

## Analytical Report

Work Order: 1702087

Date Reported: 2/15/2017

Client: NVL Labs, Inc.

Collection Date: 2/8/2017 1:00:00 PM

Project: 2012-494

Lab ID: 1702087-004

Matrix: Sediment

Client Sample ID: 2817-MH24CO-S

Analyses	20	Result	RL	Qual	Units	DF	Date Analyzed
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**Polychlorinated Biphenyls (PCB) by EPA 8082**

Batch ID: 16216

Analyst: WC

Aroclor 1016	ND	0.282	mg/Kg-dry	1	2/14/2017 8:50:00 PM
Aroclor 1221	ND	0.282	mg/Kg-dry	1	2/14/2017 8:50:00 PM
Aroclor 1232	ND	0.282	mg/Kg-dry	1	2/14/2017 8:50:00 PM
Aroclor 1242	ND	0.282	mg/Kg-dry	1	2/14/2017 8:50:00 PM
Aroclor 1248	ND	0.282	mg/Kg-dry	1	2/14/2017 8:50:00 PM
Aroclor 1254	ND	0.282	mg/Kg-dry	1	2/14/2017 8:50:00 PM
Aroclor 1260	ND	0.282	mg/Kg-dry	1	2/14/2017 8:50:00 PM
Aroclor 1262	ND	0.282	mg/Kg-dry	1	2/14/2017 8:50:00 PM
Aroclor 1268	ND	0.282	mg/Kg-dry	1	2/14/2017 8:50:00 PM
Total PCBs	ND	0.282	mg/Kg-dry	1	2/14/2017 8:50:00 PM
Surr: Decachlorobiphenyl	49.4	30.8-168	%Rec	1	2/14/2017 8:50:00 PM
Surr: Tetrachloro-m-xylene	50.3	30.1-143	%Rec	1	2/14/2017 8:50:00 PM

**Mercury by EPA Method 7471**

Batch ID: 16205

Analyst: WF

Mercury	ND	0.694	mg/Kg-dry	1	2/13/2017 1:48:31 PM
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**Total Metals by EPA Method 6020**

Batch ID: 16202

Analyst: TN

Arsenic	13.4	0.213	mg/Kg-dry	1	2/13/2017 3:14:03 PM
Barium	208	1.06	mg/Kg-dry	1	2/13/2017 3:14:03 PM
Cadmium	2.36	0.426	mg/Kg-dry	1	2/13/2017 3:14:03 PM
Chromium	82.7	0.213	mg/Kg-dry	1	2/13/2017 3:14:03 PM
Copper	226	0.426	B mg/Kg-dry	1	2/13/2017 3:14:03 PM
Lead	150	0.426	mg/Kg-dry	1	2/13/2017 3:14:03 PM
Nickel	64.2	0.213	mg/Kg-dry	1	2/13/2017 3:14:03 PM
Selenium	2.08	1.06	mg/Kg-dry	1	2/13/2017 3:14:03 PM
Silver	0.929	0.213	mg/Kg-dry	1	2/13/2017 3:14:03 PM
Zinc	1,740	1.06	mg/Kg-dry	1	2/13/2017 3:14:03 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R34359

Analyst: BB

Percent Moisture	64.7	0.500	wt%	1	2/9/2017 2:15:03 PM
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Original

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RCLLC 0012979



Date: 2/15/2017

Work Order: 1702087  
CLIENT: NVL Labs, Inc.  
Project: 2012-494

**QC SUMMARY REPORT**  
**Mercury by EPA Method 245.1**

Sample ID	MB-16199	SampType:	MBLK			Units:	µg/L			Prep Date:	2/10/2017		RunNo:	34395	
Client ID:	MBLKW	Batch ID:	16199							Analysis Date:	2/10/2017		SeqNo:	656892	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual			

Mercury ND 0.100

Sample ID	LCS-16199	SampType:	LCS	Units:	µg/L	Prep Date:	2/10/2017	RunNo:	34395		
Client ID:	LCSW	Batch ID:	16199			Analysis Date:	2/10/2017	SeqNo:	656893		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 2.39 0.100 2.500 0 95.6 85 115

Sample ID	1702066-004DDUP	SampType:	DUP	Units:	µg/L	Prep Date:	2/10/2017	RunNo:	34395		
Client ID:	BATCH	Batch ID:	16199			Analysis Date:	2/10/2017	SeqNo:	656895		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury ND 0.100 0 20

Sample ID	1702066-004DMS	SampType:	MS	Units:	µg/L	Prep Date:	2/10/2017	RunNo:	34395		
Client ID:	BATCH	Batch ID:	16199			Analysis Date:	2/10/2017	SeqNo:	656896		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 2.40 0.100 2.500 0 96.0 80 120

Sample ID	1702066-004DMSD	SampType:	MSD	Units:	µg/L	Prep Date:	2/10/2017	RunNo:	34395		
Client ID:	BATCH	Batch ID:	16199			Analysis Date:	2/10/2017	SeqNo:	656897		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Mercury 2.44 0.100 2.500 0 97.6 80 120 2.400 1.65 20

Original



Date: 2/15/2017

Work Order: 1702087  
CLIENT: NVL Labs, Inc.  
Project: 2012-494

**QC SUMMARY REPORT**  
**Mercury by EPA Method 7471**

Sample ID	MB-16205	SampType:	MBLK	Units:	mg/Kg	Prep Date:	2/13/2017	RunNo:	34422		
Client ID:	MBLKS	Batch ID:	16205			Analysis Date:	2/13/2017	SeqNo:	657110		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.250									

Sample ID	LCS-16205	SampType:	LCS	Units:	mg/Kg	Prep Date:	2/13/2017	RunNo:	34422		
Client ID:	LCSS	Batch ID:	16205			Analysis Date:	2/13/2017	SeqNo:	657111		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	0.519	0.250	0.5000	0	104	80	120				

Sample ID	1702087-004ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	2/13/2017	RunNo:	34422		
Client ID:	2817-MH24CO-S	Batch ID:	16205			Analysis Date:	2/13/2017	SeqNo:	657113		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	ND	0.708						0		20	

Sample ID	1702087-004AMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	2/13/2017	RunNo:	34422		
Client ID:	2817-MH24CO-S	Batch ID:	16205			Analysis Date:	2/13/2017	SeqNo:	657114		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.43	0.708	1.416	0.1255	92.3	70	130				

Sample ID	1702087-004AMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	2/13/2017	RunNo:	34422		
Client ID:	2817-MH24CO-S	Batch ID:	16205			Analysis Date:	2/13/2017	SeqNo:	657115		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury	1.34	0.681	1.362	0.1255	89.2	70	130	1.433	6.73	20	

Original

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RCLLC 0012981





Date: 2/15/2017

Work Order: 1702087  
 CLIENT: NVL Labs, Inc.  
 Project: 2012-494

**QC SUMMARY REPORT**  
**Polychlorinated Biphenyls (PCB) by EPA 8082**

Sample ID	MB-16216	SampType:	MBLK	Units:	mg/Kg	Prep Date:	2/13/2017	RunNo:	34456		
Client ID:	MBLKS	Batch ID:	16216			Analysis Date:	2/14/2017	SeqNo:	657887		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.100									
Aroclor 1221	ND	0.100									
Aroclor 1232	ND	0.100									
Aroclor 1242	ND	0.100									
Aroclor 1248	ND	0.100									
Aroclor 1254	ND	0.100									
Aroclor 1260	ND	0.100									
Aroclor 1262	ND	0.100									
Aroclor 1268	ND	0.100									
Total PCBs	ND	0.100									
Surr: Decachlorobiphenyl	36.7		50.00		73.4	30.8	168				
Surr: Tetrachloro-m-xylene	36.4		50.00		72.7	30.1	143				

Sample ID	LCS1-16216	SampType:	LCS	Units:	mg/Kg	Prep Date:	2/13/2017	RunNo:	34456		
Client ID:	LCSS	Batch ID:	16216			Analysis Date:	2/14/2017	SeqNo:	657885		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.00	0.100	1.000	0	100	21.7	138				
Aroclor 1260	0.920	0.100	1.000	0	92.0	20.8	137				
Surr: Decachlorobiphenyl	45.3		50.00		90.7	30.8	168				
Surr: Tetrachloro-m-xylene	48.0		50.00		95.9	30.1	143				

Sample ID	LCS2-16216	SampType:	LCS	Units:	mg/Kg	Prep Date:	2/13/2017	RunNo:	34456		
Client ID:	LCSS	Batch ID:	16216			Analysis Date:	2/14/2017	SeqNo:	657886		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	1.06	0.100	1.000	0	106	32.8	151				
Surr: Decachlorobiphenyl	44.8		50.00		89.7	30.8	168				
Surr: Tetrachloro-m-xylene	42.8		50.00		85.6	30.1	143				

Original



Date: 2/15/2017

Work Order: 1702087  
 CLIENT: NVL Labs, Inc.  
 Project: 2012-494

## QC SUMMARY REPORT

### Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID	1702087-004ADUP	SampType:	DUP	Units:	mg/Kg-dry	Prep Date:	2/13/2017	RunNo:	34456		
Client ID:	2817-MH24CO-S	Batch ID:	16216			Analysis Date:	2/14/2017	SeqNo:	657882		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.279						0		30	
Aroclor 1221	ND	0.279						0		30	
Aroclor 1232	ND	0.279						0		30	
Aroclor 1242	ND	0.279						0		30	
Aroclor 1248	ND	0.279						0		30	
Aroclor 1254	0.363	0.279						0.1005	113	30	
Aroclor 1260	ND	0.279						0		30	
Aroclor 1262	ND	0.279						0		30	
Aroclor 1268	ND	0.279						0		30	
Total PCBs	0.363	0.279						0.1005	113	30	
Surr: Decachlorobiphenyl	82.4		139.3		59.2	30.8	168		0		
Surr: Tetrachloro-m-xylene	73.5		139.3		52.8	30.1	143		0		

#### NOTES:

R - High RPD due to suspected sample inhomogeneity. The method is in control as indicated by the Laboratory Control Sample (LCS).

Sample ID	1702087-004AMS	SampType:	MS	Units:	mg/Kg-dry	Prep Date:	2/13/2017	RunNo:	34456		
Client ID:	2817-MH24CO-S	Batch ID:	16216			Analysis Date:	2/14/2017	SeqNo:	657883		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	2.52	0.270	2.695	0	93.5	27.1	166				
Aroclor 1260	2.30	0.270	2.695	0	85.3	20.6	168				
Surr: Decachlorobiphenyl	65.1		134.8		48.3	30.8	168				
Surr: Tetrachloro-m-xylene	78.1		134.8		57.9	30.1	143				

Sample ID	1702087-004AMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	2/13/2017	RunNo:	34456		
Client ID:	2817-MH24CO-S	Batch ID:	16216			Analysis Date:	2/14/2017	SeqNo:	657884		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	2.80	0.277	2.772	0	101	27.1	166	2.520	10.6	30	
Aroclor 1260	2.51	0.277	2.772	0	90.7	20.6	168	2.300	8.86	30	
Surr: Decachlorobiphenyl	67.9		138.6		49.0	30.8	168		0		

Original

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RCLLC 0012983



Date: 2/15/2017

Work Order: 1702087  
CLIENT: NVL Labs, Inc.  
Project: 2012-494

## QC SUMMARY REPORT

### Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID	1702087-004AMSD	SampType:	MSD	Units:	mg/Kg-dry	Prep Date:	2/13/2017	RunNo:	34456		
Client ID:	2817-MH24CO-S	Batch ID:	16216			Analysis Date:	2/14/2017	SeqNo:	657884		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: Tetrachloro-m-xylene	82.5		138.6		59.5	30.1	143		0		



Date: 2/15/2017

Work Order: 1702087  
CLIENT: NVL Labs, Inc.  
Project: 2012-494

**QC SUMMARY REPORT**  
**Polychlorinated Biphenyls (PCB) by EPA 8082**

Sample ID	1701119-001A	SampType:	MBLK		Units:	µg/L		Prep Date:	2/13/2017		RunNo:	34454	
Client ID:	MBLKW	Batch ID:	16207					Analysis Date:	2/14/2017		SeqNo:	657806	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual
Aroclor 1016		ND	0.0993										
Aroclor 1221		ND	0.0993										
Aroclor 1232		ND	0.0993										
Aroclor 1242		ND	0.0993										
Aroclor 1248		ND	0.0993										
Aroclor 1254		ND	0.0993										
Aroclor 1260		ND	0.0993										
Aroclor 1262		ND	0.0993										
Aroclor 1268		ND	0.0993										
Total PCBs		ND	0.0993										
Surr: Decachlorobiphenyl		336		397.2		84.5	23.1	172					
Surr: Tetrachloro-m-xylene		298		397.2		74.9	10	125					

Sample ID	MB-16207	SampType: MBLK		Units: µg/L	Prep Date: 2/13/2017			RunNo: 34454			
Client ID:	MBLKW	Batch ID: 16207		Analysis Date: 2/14/2017			SeqNo: 657827				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.0993									
Aroclor 1221	ND	0.0993									
Aroclor 1232	ND	0.0993									
Aroclor 1242	ND	0.0993									
Aroclor 1248	ND	0.0993									
Aroclor 1254	ND	0.0993									
Aroclor 1260	ND	0.0993									
Aroclor 1262	ND	0.0993									
Aroclor 1268	ND	0.0993									
Total PCBs	ND	0.0993									
Surr: Decachlorobiphenyl	336		397.2		84.5	23.1	172				
Surr: Tetrachloro-m-xylene	298		397.2		74.9	10	125				

Original

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**RCLLC 0012985**



Date: 2/15/2017

Work Order: 1702087  
 CLIENT: NVL Labs, Inc.  
 Project: 2012-494

## QC SUMMARY REPORT

### Polychlorinated Biphenyls (PCB) by EPA 8082

Sample ID	LCS1-16207	SampType:	LCS	Units:	µg/L	Prep Date:	2/13/2017	RunNo:	34454		
Client ID:	LCSW	Batch ID:	16207			Analysis Date:	2/14/2017	SeqNo:	657825		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.27	0.100	2.006	0	63.5	32.4	133				
Aroclor 1260	1.35	0.100	2.006	0	67.5	33.5	147				
Surr: Decachlorobiphenyl	311		401.2		77.6	23.1	172				
Surr: Tetrachloro-m-xylene	216		401.2		53.9	10	125				

Sample ID	LCS2-16207	SampType:	LCS	Units:	µg/L	Prep Date:	2/13/2017	RunNo:	34454		
Client ID:	LCSW	Batch ID:	16207			Analysis Date:	2/14/2017	SeqNo:	657826		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1254	1.79	0.100	2.005	0	89.3	21.3	139				
Surr: Decachlorobiphenyl	297		401.1		74.0	23.1	172				
Surr: Tetrachloro-m-xylene	250		401.1		62.4	10	125				

Sample ID	1702087-001ADUP	SampType:	DUP		Units:	µg/L		Prep Date:	2/13/2017		RunNo:	34454	
Client ID:	2817-MH24	Batch ID:	16207					Analysis Date:	2/14/2017		SeqNo:	657819	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual
Aroclor 1016		ND	0.0995							0		30	
Aroclor 1221		ND	0.0995							0		30	
Aroclor 1232		ND	0.0995							0		30	
Aroclor 1242		ND	0.0995							0		30	
Aroclor 1248		ND	0.0995							0		30	
Aroclor 1254		ND	0.0995							0		30	
Aroclor 1260		ND	0.0995							0		30	
Aroclor 1262		ND	0.0995							0		30	
Aroclor 1268		ND	0.0995							0		30	
Total PCBs		ND	0.0995							0		30	
Surr: Decachlorobiphenyl		223		397.9		56.0	23.1	172			0		
Surr: Tetrachloro-m-xylene		208		397.9		52.2	10	125			0		

Original

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RCLLC 0012986



Date: 2/15/2017

Work Order: 1702087  
CLIENT: NVL Labs, Inc.  
Project: 2012-494

**QC SUMMARY REPORT**  
**Polychlorinated Biphenyls (PCB) by EPA 8082**

Sample ID	1702087-002AMS	SampType: MS	Units: µg/L			Prep Date: 2/13/2017			RunNo: 34454		
Client ID:	2817-MH6	Batch ID: 16207				Analysis Date: 2/14/2017			SeqNo: 657821		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.50	0.0998	1.995	0	75.2	45.5	118				
Aroclor 1260	1.23	0.0998	1.995	0	61.6	50.8	129				
Surr: Decachlorobiphenyl	344		399.1		86.1	23.1	172				
Surr: Tetrachloro-m-xylene	205		399.1		51.3	10	125				

Sample ID	1702087-002AMSD	SampType: MSD	Units: µg/L			Prep Date: 2/13/2017			RunNo: 34454		
Client ID:	2817-MH6	Batch ID: 16207				Analysis Date: 2/14/2017			SeqNo: 657822		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.98	0.100	2.008	0	98.7	45.5	118	1.500	27.7	30	
Aroclor 1260	1.73	0.100	2.008	0	86.2	50.8	129	1.228	34.0	30	R
Surr: Decachlorobiphenyl	438		401.7		109	23.1	172		0		
Surr: Tetrachloro-m-xylene	315		401.7		78.4	10	125		0		

**NOTES:**

R - High RPD observed, spike recoveries are within range.



**Fremont**  
ANALYTICAL

Date: 2/15/2017

Work Order: 1702087  
CLIENT: NVL Labs, Inc.  
Project: 2012-494

**QC SUMMARY REPORT**  
**Sample Moisture (Percent Moisture)**

Sample ID 1702069-002ADUP	SampType: DUP	Units: wt%			Prep Date: 2/9/2017				RunNo: 34359		
Client ID: BATCH	Batch ID: R34359	Analysis Date: 2/9/2017							SeqNo: 655719		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture	18.2	0.500						18.08	0.692	20	



Date: 2/15/2017

Work Order: 1702087  
 CLIENT: NVL Labs, Inc.  
 Project: 2012-494

**QC SUMMARY REPORT**  
 Total Metals by EPA Method 200.8

Sample ID	MB-16203	SampType:	MBLK		Units:	µg/L		Prep Date:	2/13/2017		RunNo:	34440	
Client ID:	MBLKW	Batch ID:	16203					Analysis Date:	2/14/2017		SeqNo:	657452	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual
Arsenic		ND	1.00										
Barium		ND	0.500										
Cadmium		ND	0.200										
Chromium		ND	0.500										
Copper		ND	0.500										
Lead		ND	0.500										
Nickel		ND	0.500										
Selenium		ND	1.00										
Silver		ND	0.200										
Zinc		ND	1.50										

Sample ID	LCS-16203	SampType: LCS		Units: µg/L		Prep Date: 2/13/2017			RunNo: 34440		
Client ID:	LCSW	Batch ID: 16203		Analysis Date: 2/14/2017					SeqNo: 657453		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	106	1.00	100.0	0	106	85	115				
Barium	104	0.500	100.0	0	104	85	115				
Cadmium	4.66	0.200	5.000	0	93.3	85	115				
Chromium	108	0.500	100.0	0	108	85	115				
Copper	108	0.500	100.0	0	108	85	115				
Lead	53.6	0.500	50.00	0	107	85	115				
Nickel	105	0.500	100.0	0	105	85	115				
Selenium	10.6	1.00	10.00	0	106	85	115				
Silver	4.84	0.200	5.000	0	96.9	85	115				
Zinc	91.5	1.50	100.0	0	91.5	85	115				





Date: 2/15/2017

Work Order: 1702087  
 CLIENT: NVL Labs, Inc.  
 Project: 2012-494

**QC SUMMARY REPORT**  
**Total Metals by EPA Method 200.8**

Sample ID	1702078-001ADUP	SampType:	DUP	Units:	µg/L	Prep Date:	2/13/2017	RunNo:	34440		
Client ID:	BATCH	Batch ID:	16203			Analysis Date:	2/14/2017	SeqNo:	657455		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	1.00						0		30	
Barium	1.79	0.500						1.898	5.97	30	
Cadmium	ND	0.200						0		30	
Chromium	0.657	0.500						0.5395	19.6	30	
Copper	1.66	0.500						1.710	3.18	30	
Lead	1.27	0.500						1.267	0.276	30	
Nickel	ND	0.500						0		30	
Selenium	ND	1.00						0		30	
Silver	ND	0.200						0		30	
Zinc	19.3	1.50						19.66	1.83	30	

Sample ID	1702078-001AMS	SampType: MS			Units: µg/L	Prep Date: 2/13/2017			RunNo: 34440		
Client ID:	BATCH	Batch ID: 16203			Analysis Date: 2/14/2017			SeqNo: 657456			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	532	1.00	500.0	0.3610	106	70	130				
Barium	516	0.500	500.0	1.898	103	70	130				
Cadmium	23.1	0.200	25.00	0.02050	92.3	70	130				
Chromium	559	0.500	500.0	0.5395	112	70	130				
Copper	551	0.500	500.0	1.710	110	70	130				
Lead	270	0.500	250.0	1.267	107	70	130				
Nickel	545	0.500	500.0	0.2110	109	70	130				
Selenium	51.7	1.00	50.00	0.1550	103	70	130				
Silver	21.5	0.200	25.00	0	86.1	70	130				
Zinc	504	1.50	500.0	19.66	96.8	70	130				



Date: 2/15/2017

Work Order: 1702087  
 CLIENT: NVL Labs, Inc.  
 Project: 2012-494

**QC SUMMARY REPORT**  
**Total Metals by EPA Method 200.8**

Sample ID	1702078-001AMSD	SampType:	MSD		Units:	µg/L		Prep Date:	2/13/2017		RunNo:	34440		
Client ID:	BATCH	Batch ID:	16203						Analysis Date:	2/14/2017		SeqNo:	657457	
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val		%RPD	RPDLimit	Qual	
Arsenic		521	1.00	500.0	0.3610	104	70	130	532.5		2.12	30		
Barium		514	0.500	500.0	1.898	102	70	130	516.4		0.546	30		
Cadmium		22.9	0.200	25.00	0.02050	91.4	70	130	23.08		0.879	30		
Chromium		560	0.500	500.0	0.5395	112	70	130	559.2		0.124	30		
Copper		557	0.500	500.0	1.710	111	70	130	550.8		1.04	30		
Lead		271	0.500	250.0	1.267	108	70	130	269.5		0.624	30		
Nickel		537	0.500	500.0	0.2110	107	70	130	544.9		1.53	30		
Selenium		47.2	1.00	50.00	0.1550	94.1	70	130	51.71		9.12	30		
Silver		21.1	0.200	25.00	0	84.5	70	130	21.52		1.84	30		
Zinc		490	1.50	500.0	19.66	94.0	70	130	503.8		2.79	30		



Date: 2/15/2017

Work Order: 1702087  
 CLIENT: NVL Labs, Inc.  
 Project: 2012-494

**QC SUMMARY REPORT**  
**Total Metals by EPA Method 6020**

Sample ID	MB-16202	SampType:	MBLK	Units:	mg/Kg	Prep Date:	2/13/2017	RunNo:	34427		
Client ID:	MBLKS	Batch ID:	16202			Analysis Date:	2/13/2017	SeqNo:	657052		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND	0.0725									
Barium	ND	0.362									
Cadmium	ND	0.145									
Chromium	ND	0.0725									
Copper	0.155	0.145									
Lead	ND	0.145									
Nickel	ND	0.0725									
Selenium	ND	0.362									
Silver	ND	0.0725									
Zinc	ND	0.362									

Sample ID	LCS-16202	SampType: LCS		Units: mg/Kg		Prep Date: 2/13/2017			RunNo: 34427		
Client ID:	LCSS	Batch ID: 16202		Analysis Date: 2/13/2017					SeqNo: 657053		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	39.1	0.0763	38.17	0	102	80	120				
Barium	38.6	0.382	38.17	0	101	80	120				
Cadmium	1.93	0.153	1.908	0	101	80	120				
Chromium	37.4	0.0763	38.17	0	98.1	80	120				
Copper	37.0	0.153	38.17	0	96.8	80	120				B
Lead	19.8	0.153	19.08	0	104	80	120				
Nickel	37.4	0.0763	38.17	0	97.9	80	120				
Selenium	3.36	0.382	3.817	0	88.0	80	120				
Silver	1.90	0.0763	1.908	0	99.6	80	120				
Zinc	36.5	0.382	38.17	0	95.7	80	120				



Date: 2/15/2017

Work Order: 1702087  
 CLIENT: NVL Labs, Inc.  
 Project: 2012-494

**QC SUMMARY REPORT**  
**Total Metals by EPA Method 6020**

Sample ID	1702087-004ADUP	SampType:	DUP	Units: mg/Kg-dry		Prep Date: 2/13/2017			RunNo: 34427			
Client ID:	2817-MH24CO-S	Batch ID:	16202				Analysis Date: 2/13/2017			SeqNo: 657055		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual	
Arsenic	14.5	0.211						13.45	7.65	20		
Barium	214	1.06						208.4	2.66	20		
Cadmium	2.29	0.423						2.357	2.90	20		
Chromium	89.9	0.211						82.69	8.41	20		
Copper	250	0.423						226.0	10.2	20	B	
Lead	158	0.423						149.7	5.13	20		
Nickel	72.1	0.211						64.15	11.6	20		
Selenium	2.31	1.06						2.081	10.5	20		
Silver	0.476	0.211						0.9291	64.6	20	R	
Zinc	1,750	1.06						1,740	0.710	20		

**NOTES:**

R - High RPD observed. The method is in control as indicated by the LCS.

Sample ID	1702087-004AMS	SampType:	MS	Units: mg/Kg-dry			Prep Date: 2/13/2017			RunNo: 34427		
Client ID:	2817-MH24CO-S	Batch ID:	16202				Analysis Date: 2/13/2017			SeqNo: 657057		
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic		125	0.213	106.5	13.45	105	75	125				
Barium		293	1.06	106.5	208.4	79.8	75	125				
Cadmium		7.29	0.426	5.325	2.357	92.7	75	125				
Chromium		206	0.213	106.5	82.69	116	75	125				
Copper		326	0.426	106.5	226.0	93.5	75	125				B
Lead		194	0.426	53.25	149.7	82.8	75	125				
Nickel		184	0.213	106.5	64.15	112	75	125				
Selenium		13.6	1.06	10.65	2.081	109	75	125				
Silver		5.08	0.213	5.325	0.9291	78.0	75	125				
Zinc		1,690	1.06	106.5	1,740	-45.6	75	125				S

**NOTES:**

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.



Date: 2/15/2017

Work Order: 1702087  
 CLIENT: NVL Labs, Inc.  
 Project: 2012-494

**QC SUMMARY REPORT**  
**Total Metals by EPA Method 6020**

Sample ID	1702087-004AMSD	SampType:	MSD	Units: mg/Kg-dry			Prep Date: 2/13/2017			RunNo: 34427		
Client ID:	2817-MH24CO-S	Batch ID:	16202				Analysis Date: 2/13/2017			SeqNo: 657058		
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic		130	0.213	106.5	13.45	109	75	125	125.0	3.63	20	
Barium		282	1.06	106.5	208.4	69.1	75	125	293.4	3.95	20	S
Cadmium		7.35	0.426	5.325	2.357	93.8	75	125	7.291	0.868	20	
Chromium		198	0.213	106.5	82.69	108	75	125	205.9	4.09	20	
Copper		319	0.426	106.5	226.0	87.2	75	125	325.5	2.06	20	B
Lead		181	0.426	53.25	149.7	58.2	75	125	193.8	7.01	20	S
Nickel		179	0.213	106.5	64.15	108	75	125	183.9	2.81	20	
Selenium		12.8	1.06	10.65	2.081	100	75	125	13.64	6.64	20	
Silver		5.23	0.213	5.325	0.9291	80.8	75	125	5.082	2.87	20	
Zinc		1,680	1.06	106.5	1,740	-57.5	75	125	1,691	0.752	20	S

**NOTES:**

S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.  
 S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample ID	1702087-004APDS	SampType:	PDS	Units:	mg/Kg-dry	Prep Date:	2/13/2017	RunNo:	34427		
Client ID:	2817-MH24CO-S	Batch ID:	16202			Analysis Date:	2/13/2017	SeqNo:	657059		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	1.780	1.06	50.0	1.630	149	80	120				S

**NOTES:**

S - Spike recovery indicates a possible matrix effect. The method is in control as indicated by the Laboratory Control Sample (LCS).



# Fremont

## Sample Log-In Check List

Client Name: NVL  
Logged by: Erica Silva

Work Order Number: 1702087  
Date Received: 2/8/2017 5:05:00 PM

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Client

### Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐  
4. Shipping container/cooler in good condition? Yes ☒ No ☐  
5. Custody Seals present on shipping container/cooler?  
(Refer to comments for Custody Seals not intact) Yes ☐ No ☐ Not Required ☒  
6. Was an attempt made to cool the samples? Yes ☐ No ☒ NA ☐  
Unknown prior to receipt  
7. Were all items received at a temperature of  $>0^{\circ}\text{C}$  to  $10.0^{\circ}\text{C}$ ? Yes ☐ No ☒ NA ☐

### Please refer to Item Information

8. Sample(s) in proper container(s)? Yes ☒ No ☐  
9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
10. Are samples properly preserved? Yes ☒ No ☐  
11. Was preservative added to bottles? Yes ☒ No ☐ NA ☐  
12. Is there headspace in the VOA vials? Yes ☐ No ☐ NA ☒  
13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐  
14. Does paperwork match bottle labels? Yes ☒ No ☐  
15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
16. Is it clear what analyses were requested? Yes ☒ No ☐  
17. Were all holding times able to be met? Yes ☒ No ☐

### Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☒ No ☐ NA ☐

Person Notified: Marcus Gladden Date: 2/9/2017  
By Whom: Erica Silva Via: ☒ eMail ☐ Phone ☐ Fax ☐ In Person  
Regarding: \_\_\_\_\_  
Client Instructions: Additional metals added to select list for 003B and 004A

19. Additional remarks:

Client ok'd Total Metals by EPA 200.8 for water samples and Metals by EPA 6020 for sediment sample at drop-off.

### Item Information

Item #	Temp °C
Cooler	14.8
Sample	13.2
Temp Blank	11.1

\* Note: DoD/ELAP and TNI require items to be received at  $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$

Original

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RCLLC 0012995



# Fremont

3600 Fremont Ave N.  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7178

## Chain of Custody Record and Laboratory Services Agreement

Date: 2/8/17

Laboratory Project No (Internal): 1702087

Page: 1 of: 1

Client: NVL LABS  
Address: 4708 AURORA AVE N.  
City, State, Zip: SEATTLE WA 98103  
Telephone: 206-547-0100 Fax: \_\_\_\_\_

Project Name: \_\_\_\_\_  
Project No: 2012-494 Collected by: MARLUS GUADEN  
Location: 3100 AIRPORT WAY S. SEATTLE WA 98134  
Report To (PM): MARLUS GUADEN  
PM Email: MARLUS-G@NVL.LABS.COM

\*Matrix Codes: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	Analytes													Comments
				VOCs (EPA 8260 / 624)	GV/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (H/CID)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SUM / 625)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)***	EDs (6021)		
1 2817-MH24	2/8/17	12:30	SW									X	X	T		Pb only	2x 1L BOTTLES, LEAD ONLY FOR 6020
2 2817-MH6	2/8/17	12:45	SW									X	X	T		Pb only	2x 1L BOTTLES, Pb ONLY for 6020
3 2817-MH24CO-A	2/8/17	13:00	WW									X	X	T			1x 1L BOTTLE, Cr, Cu, Ni, Pb, Zn for 6020
4 2817-MH24CO-S	2/8/17	13:00	SD									X	X				Cr, Cu, Ni, Pb, Zn for 6020 analysis
5																	
6																	REWORKING LIMIT of 0.1 ug/L
7																	NEEDED for AQUEOUS SAMPLES
8																	FOR EPA 8082
9																	RL of 2.0 mg/L NEEDED for
10																	AQUEOUS LEAD SAMPLES

\*\*Metals Analysis (Circle): MTCA-S RCRA-S Priority Pollutants TAL Individual: Ag, Al, As, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sr, Sn, Ti, Tl, U, V, Zn

\*\*\*Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

Sample Disposal: ☐ Return to Client ☒ Disposal by Lab (Samples will be held for 30 days unless otherwise noted. A fee may be assessed if samples are retained after 30 days.)

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above, that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished	Date/Time	Received	Date/Time
	2/8/17 17:05		2/8/17 17:05
Relinquished	Date/Time	Received	Date/Time
x		x	

Turn-around times for samples received after 4:00pm will begin on the following business day.

Special Remarks: RL of 0.1 ug/L NEEDED for AQUEOUS PCB SAMPLES 2/15/17 2/9/17

TAT → SameDay\* NextDay\* 2 Day 3 Day 5 Day

\*Please coordinate with the lab in advance

Distribution: White - Lab, Yellow - File, Pink - Originator

www.fremontanalytical.com

CC 4.5.16 - 1 of 2

RCLLC 0012996



**Industrial Waste Program**  
**14-Day Report for Discharge or Permit Violation**

For more information on reporting requirements, refer to your Permit, Section S4.D. If you have a Major/Minor Discharge Authorization, refer to General Condition D.

<b>Date:</b> February 10, 2017	<b>Permit/Authorization number:</b> 7927-01
<b>Company/Agency name:</b> Rainier Commons LLC	
<b>Sample site number:</b> IW1056A and IW1056B	
<b>1. Description and cause of noncompliance event:</b> (Include dates, times, locations, sample results, and estimated gallons discharged)  NO SPILLS OR UNAUTHORIZED DISCHARGES HAVE OCCURRED. Due to the lack of a significant rain event following the approval of this permit, Rainier Commons had been unable to obtain our semi-annual aqueous samples from the subject sample sites.	
<b>2. Date and time King County notified:</b> (Requirement is within 24 hours of learning of violation unless event was spill or slug discharge then must have notified immediately)  King County was notified of this condition on December 29, 2016, seventeen days prior to the due date of the self-monitoring report.	
<b>3. Corrective actions taken to respond to the violation and ensure ongoing compliance:</b>  The first significant rain event since permit approval (weekends excepted) occurred on February 8, 2017. Rainier Commons' independent laboratory personnel were on-site and collected aqueous samples from the subject sites at that time.	
<b>4. If discharge violation, enter follow-up sample collection date and results:</b> (May use subsequent self-monitoring sample if collected and analyzed within 14 days of learning of violation)  NO SPILLS OR UNAUTHORIZED DISCHARGES HAVE OCCURRED.	
<b>Additional sheets attached:</b> <input checked="" type="checkbox"/> YES or <input type="checkbox"/> NO	
<i>I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.</i>	
<b>Signature:</b> 	
<b>Name:</b> Douglas P Lansing	
<b>Date:</b> February 10, 2017	
<b>Title:</b> Project Manager	
<b>Person signing above is:</b> (choose one) <input type="checkbox"/> Authorized Representative <input checked="" type="checkbox"/> Delegated Authorized Representative*	

**Please return this form and attachments to:**  
King County Industrial Waste Program  
201 S. Jackson Street, Suite 513, Seattle, WA 98104-3855  
Fax: 206-263-3001  
Email: [info.KCIW@kingcounty.gov](mailto:info.KCIW@kingcounty.gov)

**RCLLC 0012997**





## Industrial Waste Program 14-Day Report for Discharge or Permit Violation

- ☐ For more information on reporting requirements, refer to your Permit, Section S4.D. If you have a Major/Minor Discharge Authorization, refer to General Condition D.

\*All user reports must be signed by an authorized representative of the industrial user. "Authorized representative of industrial user" is defined by King County Code 28.82.050. If you are delegated, a current Delegation of Signatory Authority must be on file at King County or completed and attached to this form.

**Please return this form and attachments to:**

King County Industrial Waste Program  
201 S. Jackson Street, Suite 513, Seattle, WA 98104-3855  
Fax: 206-263-3001  
Email: [info.KCIW@kingcounty.gov](mailto:info.KCIW@kingcounty.gov)

*ATTACHMENT TO K.C. 14-DAY REPORT, DATED 2-10-17*

## Rainier Commons Catch Basin Testing



Doug Lansing <lansinghomes@aol.com>

Thu 12/29/2016 8:31 AM

To: Arnaud.girard@kingcounty.gov <Arnaud.girard@kingcounty.gov>;

Cc: Flannery@ryanlaw.com <Flannery@ryanlaw.com>;

Categories: Lansinghomes@aol.com

Good Morning Arnaud:

I hope you're finding time to enjoy the holiday season. I want to give you an update on our required semi-annual self-monitoring report.

With the addition of Sample Site Number IW1056B (the manhole located near the southeast corner of Building 2), we are responsible to obtain a total of two samples on a semi-annual basis. King County's initial sample for this new location was below the Screening Level identified in permit # 7927-01.

To ensure our samples reflect current storm water flow, I had Bravo Environmental perform a thorough cleaning of Site IW1056B. The water used for the cleaning was collected utilizing vacuum gear. It is being stored on-site until its contents are profiled by our laboratory.

Subsequent to the date of cleaning, we have been waiting for a significant rain event so we could obtain an aqueous sample from both sample sites. To date, no such rain event has occurred.

Reviewing the upcoming weather forecast, it does not appear that a major rain event is expected before the end of 2016. Therefore, I would like to suggest that I refrain from submitting my Semester Two, Semi-Annual Self-Monitoring Report until such a time we are able to obtain appropriate grab samples.

Thanks in advance for your consideration of this matter;



Doug Lansing



**Rainier Commons LLC**  
**Semiannual Report on Compliance with Best Management Practices for the Control of PCB-Bearing Solids**

**Reporting Period: October 1, 2016 through December 31, 2016**

Rainier Commons, in accordance with the reporting requirements of King County Wastewater Discharge Permit # 7927-01, is pleased to submit the following report. This report is intended to demonstrate compliance with the reporting requirements of Permit Section S3.F. Specific permit reporting requirements are re-stated below, in italics; followed by Rainier Commons' response.

*1a. A summary of stormwater source control BMP activities conducted during the reporting period*

Please see Exhibit "A" (two pages) for a summary of Rainier Commons' source control BMP activities.

*1b. A summary of any additional source control and sampling/monitoring activities conducted during the reporting period in response to requirements specified by the Environmental Protection Agency (EPA) in its December 18, 2013, conditional approval of Rainier Commons' Work Plan for Exterior paint removal dated March 25, 2013, and any subsequent EPA approvals related to individual Phased Work Plans related to site building exterior paint removal phases*

Please see NVL Laboratories report, dated January 19, 2017, regarding EPA required sampling/monitoring activities (attached, three pages).

*1c. An evaluation of how well the BMPs and/or pretreatment system functioned to minimize the discharge of PCBs into the sanitary sewer*

As evidenced by on-going sampling and testing by both Rainier Commons And King County Industrial Waste Program personnel, our site source control activities continue to result in sample results below the established Wastewater Screening Level.

*1d. A report on any operations and maintenance training conducted for employees that work at the site for the benefit of performing BMP activities, maintaining compliance with the permit, and continuing minimization of PCB discharges*


All Rainier Commons personnel involved with any work involving the handling materials potentially containing PCBs are re-trained annually and carry current "HAZWOPER" certifications.

*1e. A summary of all PCB results (self-monitoring and KCIW monitoring) that are greater than the screening limit of 0.1µg/L for that time period and corrective actions taken*

During the reporting period listed, all sampling test results were below the screening limit stated in the subject permit.

Should any additional information be required, please contact the undersigned at (b) (6) or (b) (6)

Sincerely:

  
Doug Lansing  
Project Manager  
Rainier Commons LLC

**RCLLC 0013000**

## EXHIBIT "A"

### RAINIER COMMONS SOURCE CONTROL "CONTAINMENT PLAN"

#### Ongoing Maintenance:

It has been our ongoing practice to collect any and all loose paint chips from the exterior horizontal surfaces of the property. Prior to performing such work, all personnel must wear protective clothing and gear, including but not limited to; gloves, mask and/or any other equipment and attire required and deemed necessary by WISHA/L&I and/or EPA. All waste collected is stored in regulated containers, properly document, characterized, transported and disposed of by tested by qualified environmental firms.

#### Cleaning of Planting Strips and Roof Surfaces:

On a weekly basis, designated and trained personnel inspect, hand pick and vacuum (using multi-layer HEPA filter) any paint chips that have fallen to the ground or roof surfaces. All material collected is documented and disposed of in designated and labeled PCB containing waste drums per EPA 40 C.F.R. regulations.

#### Filter Socks on Roof Drains & Catch Basin Drains:

In conjunction with the above described work, a weekly inspection of all roof drains and catch basins is conducted. All such drains have previously been fitted and equipped with a filter fabric media so as to filter out debris and contaminants. During the weekly inspection, if deemed necessary and the debris has reached an appreciable quantity within the filter fabric the worker will remove the drain grate, clean around the grate and dispose of the debris and filter fabric in the same manner as described above. The worker then re-fits the drain with either "Fiberweb Typar" Geo-Textile drain fabric, "Ultra Tech" Ultra-DrainGuard catch basin filters or a similar product. Once the fabric filter and debris has been removed and disposed of, Emerald Services is notified for debris transport and sample testing by Spectra Laboratories. Test results are forwarded to EPA, in connection with exterior work plan documents and reports.

#### Cleaning of Parking Lot and Walkway Surfaces:

On a consistent weekly basis McDonough & Sons, Inc. Sweeping Services power sweeps and vacuums the Rainier Commons parking lots and walkway surfaces reachable by vacuum truck. Debris from each sweeping is disposed of in a locked and properly labeled transportation container located on the west side of the property. Emerald Services periodically collects representative samples of materials inside the transportation boxes. Once collected, these samples are transported to Spectra Laboratories for testing. Results are forwarded to EPA, in connection with exterior work plan documents and reports.

#### Catch Basin Sediment Removal:

Generally on a quarterly basis, Rainier Commons removes sediment from its catch basins. The catch basin filter socks are removed and replaced as described above. During this cycle, if sediments are observed to be accumulating in the bottom of the catch basins the sediment is removed through use of hand tools and suction via Hepa-filtered shop vacuum. The sediment is then placed in the locked box in the designated and signed hazardous material storage area, for characterization and proper disposal.

## *EXHIBIT "A"*

### **Enhanced Site Source Control Actions**

#### **Calendar Year 2016**

As a continuation of our enhanced site source control program, which began September 15, 2014, a two-man crew will continue to perform control activities, including:

- Multiple rounds of cleaning and vacuuming on the roofs of Buildings 24, 1, 2, 3, 26, 5A, 22, 25, 6, 7, 18, 9, 14, and 15.
- Install/replace roof drain filters on all roofs cleaned, as needed, based on frequency and severity of rain events
- Ongoing change-out of roof filters, daily, during rain events
- Multiple cycles of hand vacuuming the parking lot and courtyard with hepa-filter vacuums
- Catch Basins cleaned of sediments, as needed, on a quarterly basis
- Hand removal and disposal of flaking paint from exterior walls to prevent introduction of PCBs into the storm water system

These enhanced activities, in conjunction with our other on-going maintenance activities, continue to provide for a very effective system of controls for PCB-laden paint, as evidenced by our catch basin sampling results.



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January 19, 2017

Shimon Mizrahi  
Rainier Commons LLC  
918 S. Horton Street, Suite 1018  
Seattle, WA 98134

**Subject:** Catch Basin Sampling for IPWP2 Segment A, South Wall Building 15  
Aqueous and Sediment Sampling  
Rainier Commons, LLC

**Site Address:** 3100 Airport Way S, Seattle, WA

**NVL Project#:** 2012-494

Dear Mr. Mizrahi:

Rainier Commons, LLC retained NVL Laboratories Inc. (NVL) to conduct the sampling at their Old Rainier Brewery site located at 3100 Airport Way South, Seattle, Washington. This report has been prepared to convey the findings of the catch basin aqueous and sediment sampling for polychlorinated biphenyl (PCB's) and metals as a part of the work associated with the Individual Phase Work Plan (IPWP) 2 Building 15 Segment A, South Wall involving the removal of paint from the south elevation of building 15 at the site.

**Pre-Work Sampling- December 18, 2015:**

NVL conducted the pre-work round of sampling on December 18, 2015. The samples were collected at roughly 12:00 noon that day and moderate precipitation had occurred earlier that same day (<http://www.nws.noaa.gov>). To collect the sample, NVL proceeded to open and inspect the catch basin referred to as Man Hole 6 (MH6) on the attached figure (attachment A). This stormwater collection point is located west of building 15 where work associated with IPWP2 for the building 15 mini-phase was preparing to start.

At the time of the sampling, following removal of the storm drain grate, MH6 was found to have adequate water for sample collection but inadequate sediment for sample collection. As a result, only an aqueous sample and no sediment sample was collected from the one sample location. The filter sock being utilized at the MH6 location was found to be clean of debris as well. Photographs of the exposed manhole were taken at the time of the inspection to document its condition. (See Attachment B)

Sampling Location	Stormwater Present?	Aqueous Sample Collected?	Sediment Present?	Sediment Sample Collected?
Man Hole 6	Yes	Yes	No	No

The sample was collected as per the Condition 6: Catch Basin Sampling Plan for IPWP1.

Once collected, the sample was transported to Fremont Analytical Laboratories under a chain-of-custody protocol before being analyzed for PCBs by EPA Method 8082.

Attached to this letter is a copy of the laboratory report dated December 24, 2015, and the site plan that shows the sample location. (Attachments C and A)

#### **Aqueous Sample Results- December 18, 2015:**

Laboratory analysis of the aqueous sample from MH6 found the sample to be Non-Detect for PCB Aroclors. As such, the sample result is below the aqueous screening limit of 0.1 ug/L for total PCB Aroclors.

Sampling Location	Aqueous PCB Screening Limit (Total Aroclors)	Sample Result	Result Above Screening Limit?
Manhole 6	.1 ug/L	ND	NO
ND = Non-Detect			

#### **Post-Work Sampling- October 13, 2016:**

NVL conducted a post-work round of catch basin sampling on October 13, 2016. Samples were collected at approximately 10:30 AM and heavy precipitation had occurred that day (<http://www.nws.noaa.gov>) allowing appropriate conditions for testing. As a result, NVL proceeded to open and inspect the manhole referred to as MH6 on the attached figure (attachment A). This stormwater collection point is located west of building 15, where the work associated with the first phase of IPWP II had been completed.

At the time of the sampling, following removal of the storm drain grate, MH6 was found to have adequate water for sampling but inadequate sediment. As a result, only aqueous samples but no sediment sample was collected at this testing location. Photographs of the exposed manhole were also taken to document its condition. (See Attachment B)

Sampling Location	Stormwater Present?	Aqueous Samples Collected?	Sediment Present?	Sediment Sample Collected?
Man Hole 6	Yes	Yes	No	No

Two storm water samples were collected as per the Condition 6: Catch Basin Sampling Plan for IPWP1.

The samples were then transported to Fremont Analytical Laboratories under a chain-of-custody protocol. One of the samples collected was analyzed for PCB content analysis by EPA Method 8082. The second sample of the storm water from MH6 was analyzed for the presence of the metals contained in the blasting media being utilized for the abatement work; Chromium (Cr), Copper (Cu), Nickel (Ni), and Zinc (Zn).

Attached to this letter are a copy of the laboratory reports dated October 21, 2016, and the site plan that shows the sample location. (Attachments C and A)

Note that a bulk sample was also collected October 13, 2016. This was a concrete substrate sample, which is addressed in a separate substrate sampling report. It is not related to catch basin sampling, just collected on the same date and therefore included with the stormwater laboratory results.

#### Aqueous PCB Results- October 13, 2016:

Laboratory analysis of the aqueous sample MH6 did not detect PCB Arochlors in the aqueous sample. Therefore, there were no exceedances of the aqueous screening limit of 0.1 milligrams per liter (mg/L) for total PCB Arochlors.

Sampling Location	Aqueous PCB Screening Limit (Total Arochlors)	Sample Result	Result Above Screening Limit?
Man Hole 6	.1 mg/L	Non Detect	NO

#### Aqueous Metals Results - October 13, 2016:

Laboratory analysis of the aqueous sample from MH6 found detectable levels of metals. Results are provided in units of micrograms per liter (ug/L).

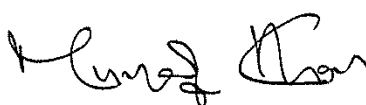
Contaminant	Chromium (ug/L)	Copper (ug/L)	Lead (ug/L)	Nickel (ug/L)	Zinc (ug/L)
Sample Result- Man Hole 6	2.28	10.3	3.91	6.90	64.8
Limit of Detection For Sample Analysis	0.500	0.500	0.500	0.500	1.5

Prepared By



Marcus Gladden  
Industrial Hygienist  
NVL Laboratories

Reviewed By



Munaf Khan  
Project Manager  
Laboratory Director / President

Attachments:

- A: Site Map with Sample Location
- B: Site Observation Photographs
- C: Laboratory Testing Reports, Fremont Analytical Laboratories Batch No. 1610258, 1512183

Stormwater and Sediment Sampling  
Rainier Commons, LLC  
Project No. 2012-494  
January 19, 2017



**From:** Doug Lansing <lansinghomes@aol.com>  
**To:** Arnaud.girard <Arnaud.girard@kingcounty.gov>  
**Cc:** Flannery <Flannery@ryanlaw.com>  
**Subject:** Rainier Commons Catch Basin Testing  
**Date:** Thu, Dec 29, 2016 8:31 am

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Good Morning Arnaud:

I hope you're finding time to enjoy the holiday season. I want to give you an update on our required semi-annual self-monitoring report.

With the addition of Sample Site Number IW1056B (the manhole located near the southeast corner of Building 2), we are responsible to obtain a total of two samples on a semi-annual basis. King County's initial sample for this new location was below the Screening Level identified in permit # 7927-01.

To ensure our samples reflect current storm water flow, I had Bravo Environmental perform a thorough cleaning of Site IW1056B. The water used for the cleaning was collected utilizing vacuum gear. It is being stored on-site until its contents are profiled by our laboratory.

Subsequent to the date of cleaning, we have been waiting for a significant rain event so we could obtain an aqueous sample from both sample sites. To date, no such rain event has occurred.

Reviewing the upcoming weather forecast, it does not appear that a major rain event is expected before the end of 2016. Therefore, I would like to suggest that I refrain from submitting my Semester Two, Semi-Annual Self-Monitoring Report until such a time we are able to obtain appropriate grab samples.

Thanks in advance for your consideration of this matter;

Doug Lansing

**From:** Doug Lansing <lansinghomes@aol.com>  
**To:** Arnaud.girard <Arnaud.girard@kingcounty.gov>  
**Cc:** Flannery <Flannery@ryanlaw.com>

**Subject:** Rainier Commons Slug Control Plan

**Date:** Wed, Nov 30, 2016 7:55 am

**Attachments:** Final Slug Discharge Control Plan - 2016.docx (33K)

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Good Morning Arnaud:

Waste Discharge Permit 7927-01, Section S3.G requires Rainier Commons submit a "Slug Discharge Control Plan" no later than December 1, 2016. Please accept the attached document as the submittal required by this permit.

As you and I had discussed in October, the nature of Rainier Commons' business does not lend itself to the potential generation a "slug discharge" in the traditional definition of the term. Therefore, our plan focuses on the detailed, ongoing processes and procedures in place, used to ensure potentially PCB-containing paint chips do not enter the King County sewerage system.

Please do not hesitate to contact me, should you have any questions.

Respectfully submitted:

Doug Lansing  
Project Manager  
Rainier Commons, LLC

**From:** Doug Lansing <lansinghomes@aol.com>  
**To:** Arnaud.girard <Arnaud.girard@kingcounty.gov>  
**Cc:** Flannery <Flannery@ryanlaw.com>

**Subject:** Corrected Final Slug Control Plan

**Date:** Wed, Nov 30, 2016 8:03 am

**Attachments:** Final Slug Discharge Control Plan - 2016.docx (33K)

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Sorry Arnaud, it looks like I attached my final draft of the plan. I've attached the "clean" final copy.

Thanks;

Doug

# King County Waste Discharge Permit Number 7927-01

## Slug Discharge Control Plan

November 30, 2016

**Overview:** As directed by King County Industrial Waste (KCIW) Management, Rainier Commons LLC applied for, and was granted, a Waste Discharge Permit effective October 1, 2016. The permit grants Rainier Commons LLC permission to discharge its storm water runoff, generated by naturally occurring rain events, into the King County sewerage system.

Rainier Commons is the owner and landlord at the Old Rainier Brewery site, which is now a multi-use campus for artists and artisans, among others. Rainier Commons and King County Wastewater Treatment Division personnel concur that the site and Rainier Commons LLC's operation of the site as a landlord does not produce any industrial waste water through its own operations.

Section S3.G of the subject permit requires Rainier Commons to submit a "Slug Discharge Control Plan" for KCIW review and approval. This is a standard requirement for a permit; however, Rainier Commons neither produces any on-site industrial waste, nor employs any processes capable of creating a "slug discharge". This control plan shall, therefore, describe the on-going protective measures in place to control for and eliminate flakes of historic layers of dried exterior paint, which contain PCBs at varying levels, against discharge into the King County sewerage system in stormwater.

### Plan Details:

#### **General Company Information:**

*Company Name:* Rainer Commons, LLC

*Address:* 918 South Horton Street, Suite 1018  
Seattle, WA 98134

*Contact Person:* Doug Lansing

*Phone Number:* 206-963-6656

*Emergency 24-hour phone number:* 206-963-6656

*Operating Schedule:* Monday – Friday, 7am – 3pm

*Description of nature of business:* Landlord. Provide lease-space for artists, artisans, other small businesses, storage, and residential

**Facility layout flow diagram:** Attached

**Inventory of process tanks and new and waste chemical stored on site:** None

**Description of discharge practices, including non-routine batch discharges:** Not Applicable. The exterior paint on many of the buildings contains varying concentrations of PCBs in the historic or older layers of the exterior coatings. These coatings are being removed serially under the supervision and in cooperation with the EPA. The only actual discharge to the King County utility is rain or stormwater.

The only batches would be rain water. The frequency of any batch discharge is the frequency of rain fall in Seattle. The measures described in this plan are the control measures to collect any delaminated paint chips to prevent entry into the King County utility system.

**Procedures for immediately notifying KCIW of spills or slug discharges:**

In the extremely unlikely event of a spill of slug discharge, the Rainier Commons Construction and Project Manager will immediately notify Mr. Arnaud Girard, KCIW Compliance Inspector, at 206-477-5440. A follow-up written notification will be sent to Mr. Girard within five days.

**Inventory of spill and leak prevention equipment:**

Rainier Commons maintains an inventory of 6mil poly sheeting, straw waddle, HEPA vacuums, and absorbent materials for use during cleaning and maintenance for spill prevention. In addition, filter socks, or filter fabric, are installed in catch basins and roof drains.

**Operation and preventative maintenance measures used to prevent a spill or slug discharge:**

As part of our ongoing, site source control plan, Rainier Commons routinely maintains and cleans all our catch basins located on campus. To ensure that no, potentially paint containing sediment is released into the sewerage system during maintenance and cleaning, Rainier Commons performs the following "slug discharge" preventive actions:

- Where possible, equip catch basins with commercially available "socks" to aid in the filtration and removal of sediments from storm water discharging into the catch basins. Maintain "socks" as needed, replace every 30 days during periods of inclement weather.
- On all catch basins, install a single layer of filter fabric (Mirafi, or equiv.) under the catch basin cover. Maintain filters as needed, replace every seven days.
- Prior to performing any maintenance work on catch basins, a vacuum cleaner – equipped with a HEPA filter – will be used to remove any debris or sediment near the catch basin cover.
- Particular care is exercised when removing catch basin covers, to prevent filter fabric from dropping into the catch basin.
- Structural framework supporting catch basin covers are vacuumed and cleaned during maintenance operations.
- All used catch basin socks, filter fabric, and vacuum sediment are collected, handled, and disposed as hazardous material.
- Accessible areas of the site's parking lot are serviced on a weekly basis, utilizing a "sweeper truck" and portable vacuum cleaners. Materials collected are handled and disposed as hazardous material.
- Hand collection of paint chips on the ground and roofs is also performed on a routine basis
- All materials collected for disposal are placed in 3mil contractor bags, and then placed in a designated, controlled storage area. The storage area includes a secondary containment berm, waterproof covering, and fenced, locked access. Storage/transportation containers within this area are DOT approved "supersacks" with 6mil poly storage bags inside a fiber-mesh reinforced shipping box.

**Employee Safety and Training Program content and schedule:**

All Rainier Commons employees involved with cleaning and maintenance of our storm water discharge system are trained and certified as Hazardous Waste Operations and Emergency Response Standard (HAZWOPER) personnel. Employees are re-certified annually.

**Description of previous slug or spill discharges that have occurred:** None



**King County**

**Wastewater Treatment Division**

Industrial Waste Program

Department of Natural Resources and Parks

201 South Jackson Street, Suite 513

Seattle, WA 98104-3855

**206-477-5300** Fax 206-263-3001

TTY Relay: 711

November 1, 2016

Shimon Mizrahi  
Rainier Commons LLC  
918 S. Horton Street, Suite 1018  
Seattle, WA 98134

Dear Mr. Shimon Mizrahi:

Results from King County's recent sampling indicate that wastewater from Rainier Commons LLC - Old Rainier Brewery Site is in compliance with discharge limits. The results of the sample(s) taken on October 13, 2016, are enclosed.

King County appreciates your compliance. If you have any questions, please call me at 206-477-5440.

Sincerely,

Arnaud Girard  
Compliance Investigator

Enclosure(s)

**RCLLC 0013012**

## Rainier Commons LLC - Old Rainier Brewery Site

### PCB's

<b>Site #</b>	IW1056A - MH near SE corner of Bldg along Airport Way S	<b>Discharge Rate</b>	NA
<b>Sample Date</b>	13-Oct-2016	<b>Time Span</b>	NA
<b>Sample #</b>	L66388-1	<b>Start Time</b>	1035
<b>Sample Code</b>	Grab		

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Aroclor 1016	12874-11-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1221	1104-28-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1232	11141-16-5	<MDL	ug/L	Compliance	NA		NA
Aroclor 1242	53469-21-9	<MDL	ug/L	Compliance	NA		NA
Aroclor 1248	12672-29-6	<MDL	ug/L	Compliance	NA		NA
Aroclor 1254	11097-69-1	<RDL .064	ug/L	Compliance	NA		NA
Aroclor 1260	11096-82-5	<MDL	ug/L	Compliance	NA		NA

<M Less than Method Detection Limit; <RDL=Less than Reporting Detection Limit; NA=Not Applicable; H=Sample handling criteria compromised; R=Data judged unusable.  
 B contamination observed; E=Estimated value; TA=Text information available which qualifies data; SGT=Nonpolar Oil Result, Silica Gel Treated.

**RCLLC 0013013**



## Rainier Commons LLC - Old Rainier Brewery Site

### Metals

<b>Site #</b>	IW1056B - MH near NE corner of Bldg 2 on N side of site	<b>Discharge Rate</b>	NA
<b>Sample Date</b>	13-Oct-2016	<b>Time Span</b>	NA
<b>Sample #</b>	L66387-2	<b>Start Time</b>	1010
<b>Sample Code</b>	Grab		

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Arsenic, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Cadmium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Chromium, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Copper, Total, ICP		<RDL .01	mg/L	Compliance	NA		NA
Lead, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Nickel, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Silver, Total, ICP		<MDL	mg/L	Compliance	NA		NA
Zinc, Total, ICP		.178	mg/L	Compliance	NA		NA

### PCB's

<b>Site #</b>	IW1056B - MH near NE corner of Bldg 2 on N side of site	<b>Discharge Rate</b>	NA
<b>Sample Date</b>	13-Oct-2016	<b>Time Span</b>	NA
<b>Sample #</b>	L66387-1	<b>Start Time</b>	1010
<b>Sample Code</b>	Composite		

Parameters	CAS	Concentration	Units	Status	Mass Load	Units	Status
Aroclor 1016	12674-11-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1221	1104-28-2	<MDL	ug/L	Compliance	NA		NA
Aroclor 1232	11141-16-5	<MDL	ug/L	Compliance	NA		NA
Aroclor 1242	53469-21-9	<MDL	ug/L	Compliance	NA		NA
Aroclor 1248	12672-29-6	<MDL	ug/L	Compliance	NA		NA
Aroclor 1254	11097-69-1	<RDL .099	ug/L	WARNING	NA		NA
Aroclor 1260	11096-82-5	<MDL	ug/L	Compliance	NA		NA

<M Less than Method Detection Limit; <RDL=Less than Reporting Detection Limit; NA=Not Applicable; H=Sample handling criteria compromised; R=Data judged unusable.  
 B contamination observed; E=Estimated value; TA=Text information available which qualifies data; SGT=Nonpolar Oil Result, Silica Gel Treated.

**RCLLC 0013014**